APR 7 1980

STATE OF CALIFORNIA

THE RESOURCES AGENCY

DEPARTMENT OF FISH AND GAME

59669

FISH BULLETIN 170

CALIFORNIA MARINE FISH LANDINGS FOR 1976

by

M.S. Oliphant

Library
NOAA, National Marine Fisheries Service
SWFC Laboratory F/SWC2
2570 Dole Street
Honolulu, HI 96822-2396

1979

This bulletin is not copyrighted. If reproduced elsewhere, the authors and the California Department of Fish and Game would appreciate receiving an appropriate acknowledgment.

The free mailing list is on an exchange basis and is limited by budgetary considerations to libraries, scientific institutions, and conservation agencies. Fish Bulletins also may be secured by individuals who can make professional use of the material. At the time of making application, individuals must state their affiliation and position. Exchange material should be sent to the Marine Technical Information Center, California Department of Fish and Game, 350 Golden Shore, Long Beach, California 90802. Those desiring to remain on the free mailing list must so indicate by returning the postcard mailed once each year with one of the bulletins.

The more popular bulletins are on sale. Individuals and organizations who do not qualify for the free mailing list may obtain these by placing orders with the Office of Procurement, Publications Section P.O. Box 1015, North Highlands, CA 95660. Price information for bulletins can be obtained from any office of the Department of Fish and Game. Money orders or checks should be made out to Office of Procurement, Publications Section.

Other available bulletins may be obtained on request from the Marine Technical Information Center, California State Fisheries Laboratory.

ROBERT N. TASTO, Editor

STATE OF CALIFORNIA

THE RESOURCES AGENCY

DEPARTMENT OF FISH AND GAME

FISH BULLETIN 170

CALIFORNIA MARINE FISH LANDINGS FOR 1976

by

M.S. Oliphant

1979

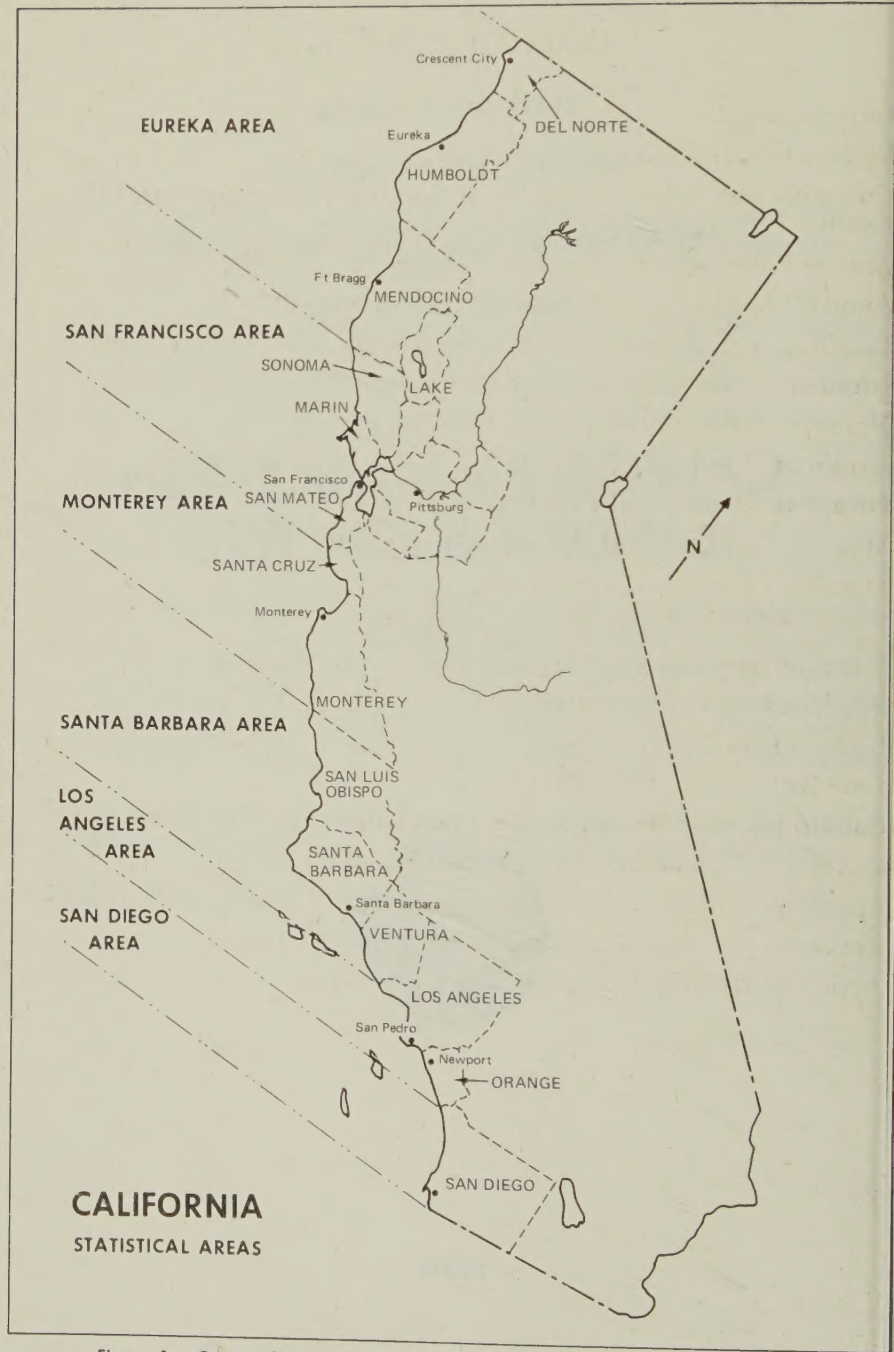

Figure 1. Geographical areas used to summarize California fisheries statistics.

TABLE OF CONTENTS

	Page
Introduction	5
Explanation of Tables	6
Common and Scientific Names of Species Reported in the 1976 Catch	10
Annual Landings and Shipments (Figure 2)	11
Annual Landings and Shipments, 1916 through 1976	12
Landings and Shipments of Leading Species Ranked by Pounds	13
Number of Licensed Commercial Fishermen	14
Number of Registered Fishing Boats by Length	14
Origin of Shipments	15
Origin of Commercial Fish Landings	16
Monthly Landings and Shipments—Statewide	18
Monthly Landings and Shipments by Area	20
Value of Landings and Shipments by Area	34
Value of Landings and Shipments by Ports and Areas	37
Partyboat Sport Catch, 1966–1976	49
Inshore Bait Landings, 1976	50
Live Bait Catch, 1972–1976	50
California Ocean Recreational Salmon Landings and Success—1976	51
California Commercial Troll Salmon Landings—1976	53
Appendix I Monthly Landings from Inland Waters	54
Appendix II Value of Landings from Inland Waters	55
Appendix III Kelp Harvest in Tons, 1916–1976	56

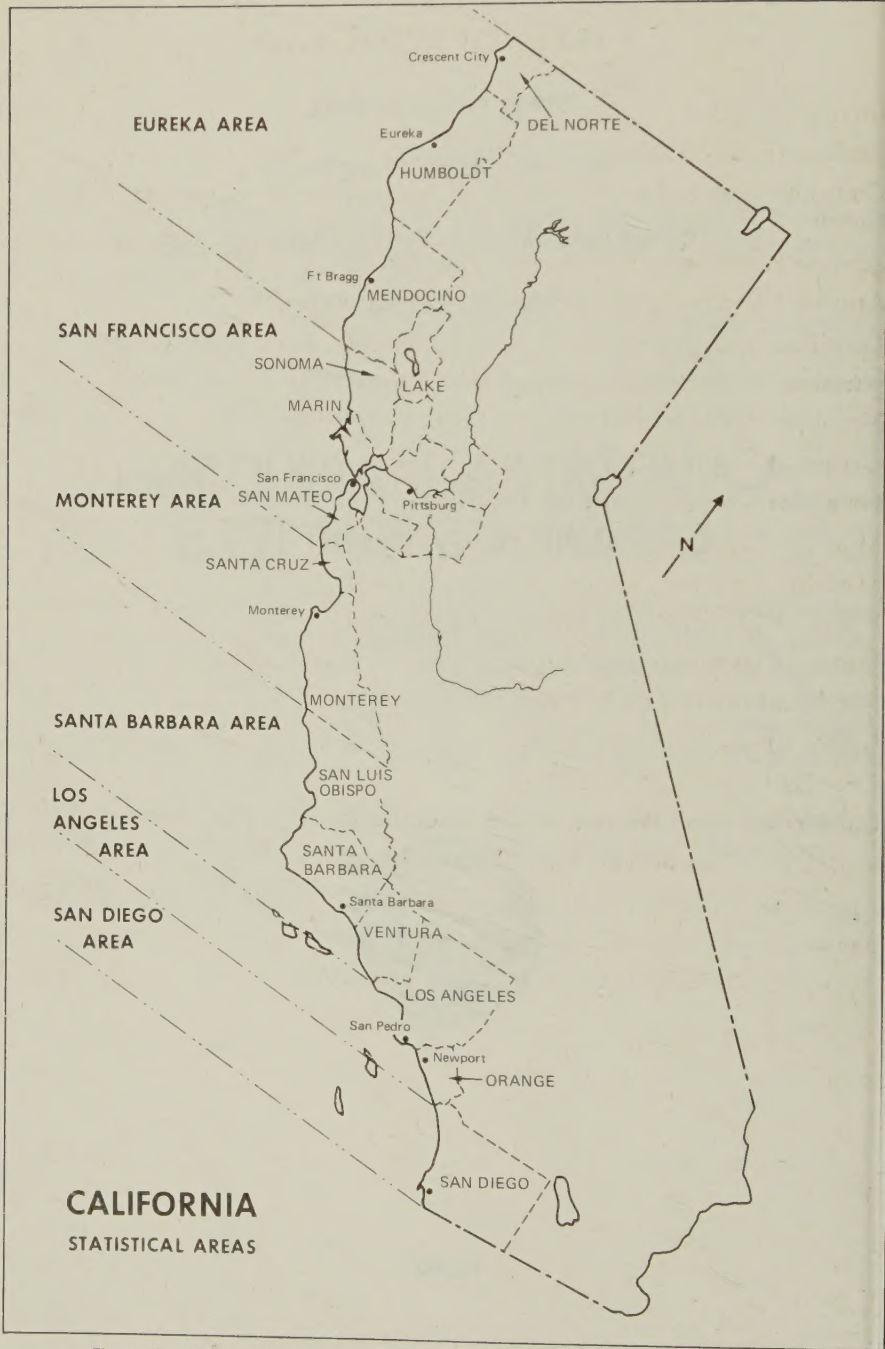

Figure 1. Geographical areas used to summarize California fisheries statistics.

INTRODUCTION

Landing bulletins provide basic catch records of amounts and values of marine resources taken by California's commercial fisheries plus summarizations of catches by the passenger carrying fishing industry. Small quantities of freshwater fish taken commercially in inland areas also are detailed. These figures are of local, national, and international significance to those interested in the wise utilization and management of California's living marine and freshwater resources.

This report for 1976 is the 36th in a series stemming from the first gathering of commercial fisheries landing data by the California Department of Fish and Game in 1916 and the subsequent first publication of these catch data in 1929 for the years 1926 and 1927.

California's fishery statistics are based on a system where fish dealers, processors, and operators of passenger carrying fishing vessels send duplicate copies of their landing records to the department. Fish Bulletin 86, which reported the catch for 1950, describes fully the system and methods used in collecting commercial fish records. Basic principles remain the same today as then, although some methods and equipment changed. Parke Young (1969) described the passenger carrying vessel industry in Fish Bulletin 145.

Credit for this publication is due largely to the cooperative efforts of the fishing industry, wholesale fish dealers, fishermen, canners, processors, and department personnel responsible for the market receipt system who have, through their efforts, provided the most accurate statistics possible. My utmost appreciation is extended to this large group of people without which this publication would not be possible.

Portions of the salmon statistics were collected under the Anadromous Fish Act Project: California AFC-12, Ocean Salmon Study and supported by the National Marine Fisheries Service, Department of Commerce, Washington, D.C.

EXPLANATION OF TABLES

Tables in this bulletin summarize statistics of the various fishery operations in California during 1976. Five types of activity are being reported this year: landings by commercial fishermen in California, commercial passenger carrying fishing vessel landings, imports of tuna from other states or foreign countries destined for processing in California, landings of marine inshore species used for bait, and catches of boats supplying live bait for sportfishing. In addition, the species composition of the 1976 ocean salmon landings is reported.

Statistics presented in this publication do not encompass all fishing activities in California since not all of these functions are reported to us. For example, recreational fishing from private boats or from shore is not reported, nor is the quantity of fish imported for use in a fresh state compiled.

Preliminary landing data are published annually in the circular series which enumerates certain fishery products produced from the catch. The 1976 figures are contained in Circular Number 51, "Statistical Report of Fresh, Canned, Cured and Manufactured Fishery Products for 1976" (Oliphant 1978).

In years to come the tables will be printed in metric values; however, for this bulletin the following necessary factors for conversion are provided.

1 Pound = 453.59 Grams

1 Pound = 0.453 Kilogram

1 Ton (Net or Short) = 0.907 Metric Ton

SOURCE OF DATA

Data concerning each commercial landing, inshore bait delivery, and import are recorded on receipts by fish dealers or processors at the time of delivery. Copies of these documents are transmitted to the department twice each month. For each transaction the dealer must provide data concerning the species, weight, and price paid to the fishermen. The data of the transaction, the fisherman's name, the fishing boat registration number, and intended use of the fish (canning, fresh, etc.) also are required. In addition, type of gear used and the specific area where the fish were caught are reported.

Commercial passenger carrying fishing vessels catch data are obtained from logs completed by the boat operator. The required log for each trip indicates the number of each species taken, number of anglers on board, number of hours fished, and the specific area fished. The date, boat name, and boat registration number also are furnished. Copies of these records are sent to the Department monthly.

Operators of boats supplying live bait keep a voluntary daily log showing number of sets, species caught, area fished, and number of scoops of bait sold. Copies of these logs are furnished the Department monthly. While these records represent most live bait landings, the reported catch should be regarded as minimal.

Clerical personnel at field offices in Eureka, Menlo Park, Long Beach and San Diego maintain contact with fish dealers, local Fish and Game wardens, and field biologists to insure that the records are accurate and transmitted promptly. All data received by the department are carefully edited for completeness and coded to facilitate processing. The information is then punched into cards and summarized with electric tabulating machines.

STATISTICAL AREAS

California is divided into seven areas for the purpose of reporting fisheries statistics (Figure 1). Each statistical area is named for a major port within its boundaries.

Prior to 1972 commercial fish landings from inland waters were included with San Francisco totals and in the statewide summaries. In the 1972 bulletin, the separation of all inland commercial fish landings resulted in Appendix I and II.

SPECIES

The common and scientific names of species reported here are those designated by the department (Gates and Frey 1974). Some species are reported only collectively when, for economic or other reasons, their separation is not practical (Table 1).

Salmon landings reported in the tables are for all species combined. However, biologists from the department's Anadromous Fisheries Branch sample the commercial and sport salmon fisheries to determine species composition of catches and to obtain volume estimates of the unreported skiff catch. The sampling methods and results for 1952 through 1965 were detailed by Jensen and Swartzell (1967); since 1966, results have been presented annually in the landing bulletins.

The miscellaneous fish category, as reported in the 1976 landings tables, consists of small volume deliveries of the following species: lamprey, California moray, striped mullet, Pacific halibut, sargo, American shad, spotted cabrilla, and wolf-eel. Reporting of skate and ray species on market receipts was poor; the reported species consisted of skates, rays, stingrays, and shovelnose guitarfish. Miscellaneous mollusks consisted of mussels, quahogs, sea snails, softshell clams, and Washington clams.

Due to increasing requests for marine plant harvest information, a table of kelp and agar landings is presented in Appendix III. This is an updated, expanded version of the table presented by Frey (1971) on giant kelp, *Macrocystis* spp., landings by open and leased beds dating back to 1916.

CONDITION

Most fish and shellfish are landed in a round condition; however, some species, such as barracuda, salmon, and white sea bass may be eviscerated before being brought ashore. Some species, such as swordfish, are also headed at sea. The condition of fish landed or shipped into the state cannot always be determined, so the tables represent summarized weights as reported to the Department without regard to condition.

Since 1963, oyster landings have been reported as packed weight rather than weight in the shell. Packed weight is estimated to be 15.5% of the live weight for Pacific oysters and 10.9% for eastern oysters. Landings reported in measurements other than weight are equated to pounds using conversion factors determined by periodic sampling.

Abalone number to weight conversion factors were reexamined during the 1970–71 abalone season by a Department biological team. These conversion factors, rounded off to whole numbers were used in 1972. The same factors are used in this bulletin and are as follows:

Abalone, red	45 pounds per dozen
Abalone, pink	25 pounds per dozen
Abalone, green	25 pounds per dozen
Abalone, black	25 pounds per dozen
Abalone, white	20 pounds per dozen
Clam, Washington	7 pounds per dozen
Crab, Dungeness	2 pounds each
Live bait	12.5 pounds per scoop

VALUE

Value is computed from prices paid to fishermen. Area value figures are ascertained by summing the value of all individual landings in that area. The value for an individual port within an area is calculated from weights of each species landed at that port and the average price paid for the species in that area. When the price paid for an individual landing is not specified, the average price paid for the species in the area is used.

INSHORE BAIT

The inshore bait fishery takes numerous species of fish and invertebrates from bays, rivers, and intertidal regions. Records of this fishery have been published as a separate summary in landing bulletins since 1963. Conversion factors used for inshore bait for 1975 were as follows:

Crab, sand	0.041 pound per dozen
	4.5 pounds per gallon
Crab, shore	0.013 pound per dozen
Mudsucker	0.465 pound per dozen
Mussel	80.000 pounds per sack
Sculpin, Pacific staghorn	0.465 pound per dozen
Shrimp, ghost	0.128 pound per dozen

REFERENCES

Calif. Dept. Fish and Game. 1952. The commercial fish catch of California for the year 1950. Calif. Dept. Fish and Game, Fish Bull., (86): 1–73.

Frey, Herbert W. (ed.) 1971. California's living marine resources and their utilization. Calif. Dept. Fish and Game, Sacramento. 149p.

Gates, Doyle E., and Herbert W. Frey. 1974. Designated common names of certain marine organisms of California. Calif. Dept. Fish and Game, Fish Bull., (161): 55–90.

Jensen, Paul T., and Phillip G. Swartzell. 1967. California salmon landings 1952 through 1965. Calif. Dept. Fish and Game, Fish Bull., (135): 43–57.

Oliphant, M.S. 1978. Statistical report of fresh, canned, cured and manufactured fishery products for 1976. Calif. Dept. Fish and Game, Circular, (51): 1–19.

Young, Parke H. 1969. The California partyboat fishery 1947–1967. Calif. Dept. Fish and Game, Fish Bull., (145): 1–91.

TABLE 1
Common and Scientific Names of Species Reported in the 1976 Catch

Common name	Scientific name
FISHES	
Anchovy, northern	*Engraulis mordax*
Barracuda, California	*Sphyraena argentea*
Bass, rock	
Kelp bass	*Paralabrax clathratus*
Sand bass, barred	*Paralabrax nebulifer*
Sand bass, spotted	*Paralabrax maculatofasciatus*
Blackfish, Sacramento	*Orthodon microlepidotus*
Bonito, Pacific	*Sarda chiliensis*
Butterfish, Pacific	*Peprilus simillimus*
Cabezon	*Scorpaenichthys marmoratus*
Carp	*Cyprinus carpio*
Croaker	
White	*Genyonemus lineatus*
Queenfish	*Seriphus politus*
Dolphinfish	*Coryphaena hippurus*
Eel, wolf	*Anarrhicthys ocellatus*
Flounder	
Arrowtooth	*Atheresthes stomias*
Starry	*Platichthys stellatus*
Flying fish	*Cypselurus spp.*
Grenadiers	
California	*Nezumia stelgidolepis*
Pacific	*Coryphaenoides acrolepis*
Grouper	*Mycteroperca spp.*
Hake, Pacific	*Merluccius productus*
Halfmoon	*Medialuna californiensis*
Halibut, California	*Paralichthys californicus*
Hardhead	*Mylopharodon conocephalus*
Herring, Pacific	*Clupea harengus pallasii*
Hitch	*Lavinia exilicauda*
Lingcod	*Ophiodon elongatus*
Mackerel	
Jack	*Trachurus symmetricus*
Pacific	*Scomber japonicus*
Moray, California	*Gymnothorax mordax*
Mudscuker, longjaw	*Gillichthys mirabilis*
Mullet, striped	*Mugil cephalus*
Opah	*Lampris regius*
Perch, ocean	*Members of family Embiotocidae*
Rockfish	*Members of family Scorpaenidae*
Sablefish	*Anoplopoma fimbria*
Salmon	
King	*Oncorhynchus tshawytscha*
Pink	*Oncorhynchus gorbuscha*
Silver	*Oncorhynchus kisutch*
Sanddab	*Citharichthys sordidus*
Sardine, Pacific	*Sardinops sagax caeruleus*
Sculpin	*Scorpaena guttata*
Sculpin, Pacific staghorn	*Leptocottus armatus*
Sea bass, giant	*Stereolepis gigas*
Seabass, white	*Cynoscion nobilis*
Shad, American	*Alosa sapidissima*
Shad, threadfin	*Dorosoma petenense*
Shark	*Members of family Alopiidae, Carcharhinidae, Lamnidae and Squalidae*
Sheephead, California	*Pimelometopon pulchrum*
Skates and Rays	*Members of family Rhinobatidae, Rajidae and Myliobatidae*
Smelt	
Jacksmelt	*Atherinopsis californiensis*
Night	*Spirinchus starksii*
Surf	*Hypomesus pretiosus*
Whitebait	*Allosmerus elongatus and Spirinchus starksii*
Sole	
Butter	*Isopseta isolepis*
Dover	*Microstomus pacificus*
English	*Parophyrs vetulus*
Petrale	*Eopsetta jordani*
Rex	*Glyptocephalus zachirus*
Rock	*Lepidopsetta bilineata*
Sand	*Psettichthys melanostictus*
Sucker, western	*Catostomus occidentalis*
Swordfish	*Xiphias gladius*
Tuna	
Albacore	*Thunnus alalunga*
Bigeye	*Thunnus obesus*
Bluefin	*Thunnus thynnus*
Skipjack, tuna	*Euthynnus pelamis*
Skipjack, black	*Euthynnus lineatus*
Yellowfin	*Thunnus albacares*
Turbot	
Curlfin	*Pleuronichthys decurrens*
Diamond	*Hypsopsetta guttulata*
Horneyhead	*Pleuronichthys verticalis*
Wahoo	*Acanthocybium solanderi*
Whitefish, ocean	*Caulolatilus princeps*
Yellowtail	*Seriola dorsalis*
CRUSTACEANS	
Crab	
Dungeness	*Cancer magister*
Pelagic red	*Pleuroncodes planipes*
Rock	*Cancer spp.*
Sand	*Emerita analoga*
Crayfish	*Pacifastacus leniusculus*
	Procambarus clarkii
Lobster, spiny	*Panulirus interruptus*
Prawn	
Ridgeback	*Eusicyonia ingentus*
Spot	*Pandalus platyceros*
Shrimp	
Bay	*Crago spp.*
Brine	*Artemia salina*
Ghost, bay	*Callianassa californiensis*
Ocean, Pacific	*Pandalus jordani*
Red	*Hippolysmata californica*
MOLLUSKS	
Abalone	
Black	*Haliotis cracherodii*
Flat	*Haliotis walallensis*
Green	*Haliotis fulgens*
Pink	*Haliotis corrugata*
Pinto	*Haliotis kamtschatkama*
Red	*Haliotis rufescens*
Threaded	*Haliotis assimilis*
White	*Haliotis sorenseni*
Clam	
Freshwater	*Corbicula fluminea*
Gaper	*Tresus nuttalli*
Jackknife, California	*Tagelus californianus*
Littleneck	*Protothaca staminea*
Purple	*Sanguinolaria nuttalli*
Quahog, northern	*Mercenaria mercenaria*
Softshell	*Mya arenaria*
Washington, common	*Saxidomus nuttalli*
Mussel	
Bay	*Mytilus edulis*
Seamussel	*Mytilus californianus*
Octopi	*Polypus spp.*
Oyster	
Eastern	*Crassostrea virginica*
Giant Pacific	*Crassostrea gigas*
Snail, sea	*Astraea spp.*
Squid, market	*Loligo opalescens*
ECHINODERM	
Sea Urchin	*Strongylocentrotus franciscanus*
AMPHIBIA	
Bullfrog	*Rana catesbeiana*

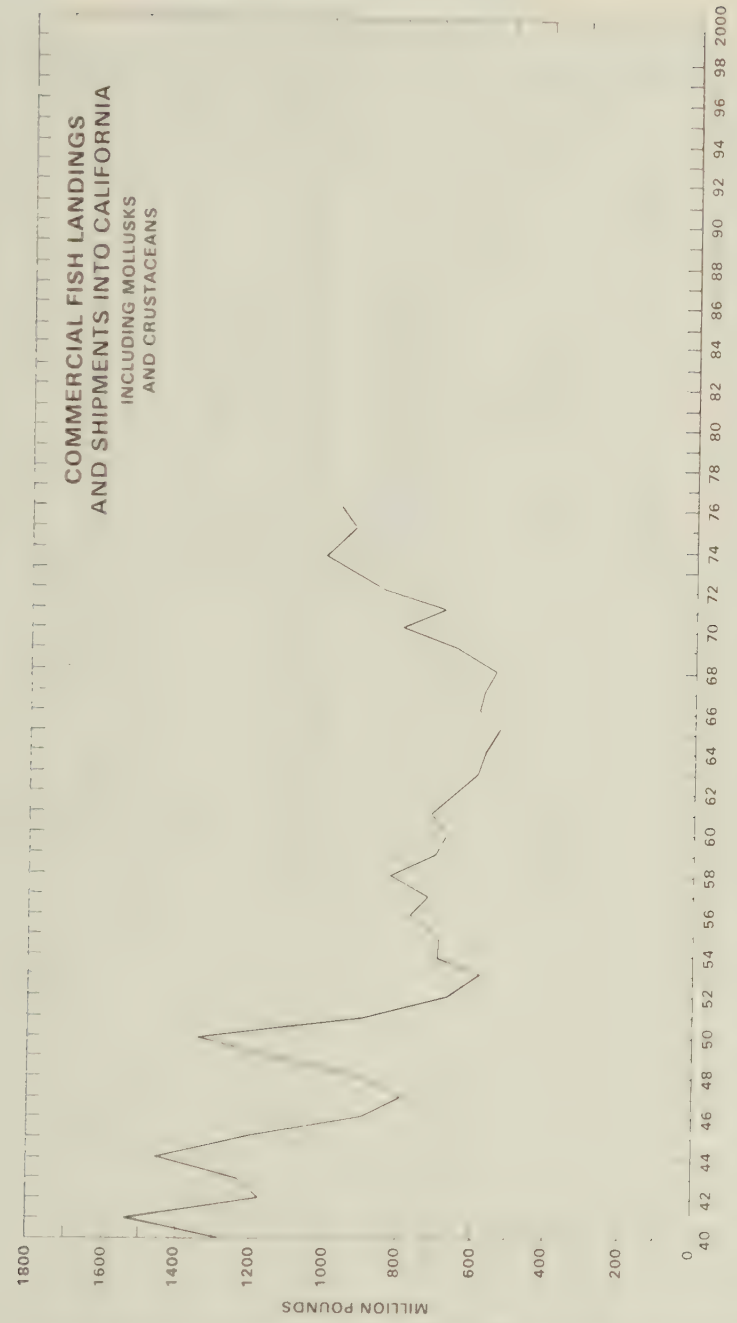

Figure 2. Total annual landings and shipments into California 1940–1976 (see Table 2). Since 1965, tunas are the only species included in shipments.

TABLE 2

Total Annual Landings and Shipments Into California of Commercial Fish, Mollusks, and Crustaceans; Includes Sardine Deliveries to Reduction Ships During 1930 Through 1938

Year	Thousands of pounds	Year	Thousands of pounds
1916	95,003	1946	919,822
1917	209,877	1947	795,499
1918	261,134	1948	900,467
1919	266,270	1949	1,135,339
1920	222,004	1950	1,366,676
1921	135,348	1951	904,114
1972	182,343	1952	694,996
1923	253,875	1953	618,919
1924	340,446	1954	713,410
1925	437,502	1955	710,713
1926	394,964	1956	772,551
1927	487,166	1957	738,550
1928	583,527	1958	832,919
1929	856,854	1959	713,423
1930	702,189	1960	694,663
1931	502,390	1961	725,253
1932	556,139	1962	663,107
1933	821,805	1963	592,899
1934	1,390,798	1964	591,131
1935	1,448,017	* 1965	544,480
1936	1,764,900	1966	591,533
1937	1,362,984	1967	589,028
1938	1,310,596	1968	567,214
1939	1,486,535	1969	672,793
1940	1,297,518	1970	798,415
1941	1,528,892	1971	687,995
1942	1,173,414	‡ 1972	845,699
1943	1,234,049	1973	1,006,431
1944	1,459,456	1974	938,118
1945	1,216,501	1975	979,826
		1976	1,047,761

* Beginning in 1965 only tuna shipments are recorded.
‡ Beginning in 1972 commercial freshwater fish landings are reported separately and not included in these totals.

TABLE 3
LANDINGS AND SHIPMENTS OF LEADING SPECIES RANKED BY POUNDS *

1975				1976			
Species	*Rank*	*Thousands of pounds*	*Thousands of dollars*	*Species*	*Rank*	*Thousands of pounds*	*Thousands of dollars*
Anchovy, northern	1	317,021	$5,008	Yellowfin tuna	1	300,516	$90,672
Yellowfin tuna	2	261,587	68,762	Anchovy, northern	2	249,839	4,628
Skipjack tuna	3	120,925	29,357	Skipjack tuna	3	198,608	58,707
Albacore tuna	4	57,767	21,744	Albacore tuna	4	71,845	43,984
Jack mackerel	5	36,779	1,693	Jack mackerel	5	44,893	2,080
Pacific bonito	6	31,873	3,895	Rockfish	6	24,603	3,977
Rockfish	7	28,824	3,214	Dover sole	7	22,757	3,068
Squid, market	8	25,622	826	Bluefin tuna	8	20,570	6,144
Dover sole	9	22,688	2,507	Squid, market	9	20,306	747
Bluefin tuna	10	17,835	4,369	Dungeness crab	10	15,727	10,275
Sablefish	11	14,132	1,400	Sablefish	11	13,331	1,259
Sea urchin	12	7,367	615	Sea urchin	12	11,106	1,039
Salmon	13	6,925	6,972	Pacific bonito	13	8,897	1,222
Ocean shrimp	14	4,998	665	Salmon	14	7,786	10,707
English sole	15	4,314	797	Pacific herring	15	4,820	483
Dungeness crab	16	3,935	2,792	English sole	16	4,283	874
Petrale sole	17	3,270	755	Ocean shrimp	17	3,501	683
Lingcod	18	3,190	422	Lingcod	18	3,120	458
Pacific herring	19	2,434	220	Petrale sole	19	2,977	814
Abalone	20	2,138	1,388	Rex sole	20	2,013	411
All Others	—	13,202	5,909	All Others	—	16,263	7,217
Totals	—	979,526	$164,338	Totals	—	1,047,761	$249,449

* Only tunas are included in the shipments.

TABLE 4

Number of Licensed Commercial Fishermen

Area of residence	License year* 1975–76	1976–77
Eureka	2,261	2,689
Sacramento	788	940
San Francisco	2,821	2,936
Monterey	1,319	1,450
Santa Barbara	1,612	1,700
Los Angeles	2,477	2,414
San Diego	1,813	1,728
Alaska, Washington and Oregon fishermen licensed in California	784	965
Mexican nationals licensed in California	15	56
Other	69	88
Totals	13,959	14,966

* April 1 to March 31.

TABLE 5

Number of Registered Fishing Boats by Length

Length group in feet	License year * 1975–76	1976–77	Length group in feet	License year * 1975–76	1976–77
0–10	1	3	101–105	6	4
11–15	144	165	106–110	3	3
16–20	1,287	1,391	111–115	3	3
21–25	1,322	1,475	116–120	8	6
26–30	884	983	121–125	4	4
31–35	716	722	126–130	1	2
36–40	916	924	131–135	5	5
41–45	472	488	136–140	9	8
46–50	343	352	141–145	1	1
51–55	157	175	146–150	0	0
56–60	162	179	151–155	14	16
61–65	133	138	156–160	3	3
66–70	45	42	161–165	4	3
71–75	42	42	166–170	3	2
76–80	37	28	171–175	5	5
81–85	20	24	176–180	1	0
86–90	13	8	181 and over	40	44
91–95	8	10			
96–100	6	5	**Total**	6,818 †	7,263 ‡

* April 1 to March 31.
† The owners of 418 boats were issued fishing party licenses in 1975–76.
‡ The owners of 397 boats were issued fishing party licenses in 1976–77.
Amendment to 1974 and 1975 bulletins.
The owners of 489 boats were issued fishing party licenses in 1973–74.
The owners of 472 boats were issued fishing party licenses in 1974–75.

TABLE 6
Origin of Shipments Received for Processing in California During 1976*

SHIPPED FROM: Species	Pounds shipped to each area: Los Angeles	San Diego	Total pounds
Continental United States:			
Tuna, skipjack black	43,046	–	43,046
Oregon, Washington, Canada and Alaska:			
Tuna, yellowfin	–	6,133	6,133
Tuna, albacore	6,886,156	1,582,181	8,468,337
Mexico and Central America:			
Tuna, yellowfin	3,203,456	6,709,328	9,912,784
Tuna, skipjack	3,029,684	3,768,659	6,798,343
Tuna, bluefin	562,520	1,218,225	1,780,745
Tuna, albacore	51,233	40,511	91,744
Tuna, skipjack black	69,356	282,072	351,428
Japan:			
Tuna, yellowfin	2,743,443	467,291	3,210,734
Tuna skipjack	15,556,260	6,274,855	21,831,115
Tuna, albacore	21,040,872	2,245,482	23,286,354
Tuna, bigeye	64,260	–	64,260
China Formosa:			
Tuna, yellowfin	5,805,624	865,674	6,671,298
Tuna, skipjack	256,586	–	256,586
Tuna, albacore	2,980,584	305,305	3,285,889
Malaya:			
Tuna, yellowfin	117,716	–	117,716
Tuna, skipjack	827,792	–	827,792
Tuna, albacore	3,854,813	–	3,854,813
South Pacific Islands:			
Tuna, yellowfin	2,763,519	420,200	3,183,719
Tuna, skipjack	28,872,624	4,965,206	33,837,830
Tuna, albacore	3,638,314	–	3,638,314
Tuna, bigeye	–	280	280
Africa:			
Tuna, yellowfin	879,322	–	879,322
Tuna, skipjack	6,765,830	–	6,765,830
Tuna, bigeye	85,698	–	85,698
Tuna, skipjack black	18,182	–	18,182
Philippines:			
Tuna, yellowfin	116,894	326,952	443,846
Tuna, skipjack	994,503	718,304	1,712,807
Korea:			
Tuna, yellowfin	19,348	6,401	25,749
Tuna, skipjack	3,168,023	715,640	3,883,663
Tuna, albacore	1,460,420	–	1,460,420
TOTAL POUNDS	115,876,078	30,918,699	146,794,777

*Beginning in 1965 only tuna shipments are recorded.

TABLE 7
Origin of Commercial Fish Landings and Volume of Shipments into California During 1976

Species	Landing of catches from: California waters	Waters north of state	Waters south of state	South Pacific	Africa	Total pounds	Tuna Shipments*	Grand Total
Fish:								
Anchovy, northern	249,838,707	—	—	—	—	249,838,707	—	249,838,707
Barracuda, California	161,738	—	353	—	—	162,091	—	162,091
Bonito, Pacific	3,882,312	—	5,014,547	—	—	8,896,859	—	8,896,859
Butterfish, Pacific	68,367	—	—	—	—	68,367	—	68,367
Cabezon	19,166	—	—	—	—	19,166	—	19,166
Crocker, white	497,961	—	—	—	—	497,961	—	497,961
Dolphinfish	6,431	—	3,485	—	—	9,916	—	9,916
Eel	1,052	—	—	—	—	1,052	—	1,052
Flounder	1,181,737	—	—	—	—	1,181,737	—	1,181,737
Flounder, arrowtooth	185,228	—	—	—	—	185,228	—	185,228
Flyingfish	98,176	—	—	—	—	98,176	—	98,176
Grenadiers	92,053	—	—	—	—	92,053	—	92,053
Grouper	—	—	9,600	—	—	9,600	—	9,600
Hake, Pacific	28,521	—	—	—	—	28,521	—	28,521
Halfmoon	13,006	—	13,170	—	—	26,176	—	26,176
Halibut, California	627,574	30	796	—	—	628,400	—	628,400
Herring, Pacific	4,819,691	—	—	—	—	4,819,691	—	4,819,691
Lingcod	3,120,220	70	—	—	—	3,120,290	—	3,120,290
Mackerel, jack	44,893,081	—	—	—	—	44,893,081	—	44,893,081
Mackerel, Pacific	353,729	—	—	—	—	353,729	—	353,729
Mullet	3,307	—	—	—	—	3,307	—	3,307
Opah	2,458	—	—	—	—	2,458	—	2,458
Perch	141,494	—	543	—	—	142,037	—	142,037
Queenfish	12,914	—	—	—	—	12,914	—	12,914
Rockfish	24,568,382	645	34,152	—	—	24,603,179	—	24,603,179
Sablefish	13,331,261	—	—	—	—	13,331,261	—	13,331,261
Salmon	7,776,520	9,768	—	—	—	7,786,288	—	7,786,288
Sanddab	1,293,872	—	—	—	—	1,293,872	—	1,293,872
Sardine, Pacific	16,190	—	—	—	—	16,190	—	16,190
Sculpin	34,152	—	139,523	—	—	173,675	—	173,675
Sea bass, giant	5,884	—	50,244	—	—	56,128	—	56,128
Sea bass, white	198,140	—	860,533	—	—	1,058,673	—	1,058,673
Shark	773,264	—	88,940	—	—	862,204	—	862,204
Sheephead, California	7,999	—	326	—	—	8,325	—	8,325
Skate	161,137	—	—	—	—	161,137	—	161,137
Smelt, top or jack	11,256	—	—	—	—	11,256	—	11,256
Smelt, true	376,163	—	—	—	—	376,163	—	376,163
Smelt, whitebait	251,253	—	—	—	—	251,253	—	251,253

Sole, petrale	2,977,531	26	—	—	—	2,977,557	—	2,977,557
Sole, rex	2,012,820	—	—	—	—	2,012,820	—	2,012,820
Sole, sand	249,497	—	—	—	—	249,497	—	249,497
Sole, miscellaneous	45,458	—	—	—	—	45,458	—	45,458
Swordfish	66,817	—	16,806	—	—	83,623	—	83,623
Tuna, albacore	17,861,351	151,186	9,746,839	—	—	27,759,376	44,085,871	71,845,247
Tuna, bigeye	—	—	1,628,330	—	231,636	1,859,966	150,238	2,010,204
Tuna, bluefin	2,259,024	—	16,530,421	—	—	18,789,445	1,780,745	20,570,190
Tuna, skipjack	690,999	—	120,768,166	237,575	997,312	122,694,052	75,913,966	198,608,018
Tuna, skipjack, black	—	—	930,460	—	—	930,460	412,656	1,343,116
Tuna, yellowfin	489,480	—	273,924,996	149,830	1,500,304	276,064,610	24,451,301	300,515,911
Turbot	29,590	—	—	—	—	29,590	—	29,590
Wahoo	—	—	12,575	—	—	12,575	—	12,575
Yellowtail	77,223	—	398,708	—	—	475,931	—	475,931
Miscellaneous	4,114	—	120	—	—	4,234	—	4,234
Crustacean:								
Crab, Dungeness	15,726,774	—	—	—	—	15,726,774	—	15,726,774
Crab, pelagic red	—	—	32,000	—	—	32,000	—	32,000
Crab, rock	1,227,766	—	—	—	—	1,227,766	—	1,227,766
Lobster, California spiny	292,534	—	—	—	—	292,534	—	292,534
Prawn, ridgeback	3,130	—	—	—	—	3,130	—	3,130
Prawn, spot	112,069	—	—	—	—	112,069	—	112,069
Shrimp, Pacific Ocean	3,466,894	33,894	—	—	—	3,500,788	—	3,500,788
Miscellaneous crustacean	1,580	—	—	—	—	1,580	—	1,580
Echinoderm:								
Sea Urchin	11,106,426	—	—	—	—	11,106,426	—	11,106,426
Mollosk:								
Abalone, black	356,751	—	—	—	—	356,751	—	356,751
Abalone, green	120,489	—	—	—	—	120,489	—	120,489
Abalone, pink	431,143	—	—	—	—	431,143	—	431,143
Abalone, red	739,621	—	—	—	—	739,621	—	739,621
Abalone, hreaded	2,907	—	—	—	—	2,907	—	2,907
Abalone, white	81,907	—	—	—	—	81,907	—	81,907
Mussel	2,357	—	—	—	—	2,357	—	2,357
Octopus	81,582	36	—	—	—	81,618	—	81,618
Oyster, eastern	5,996	—	—	—	—	5,996	—	5,996
Oyster, giant Pacific	710,360	—	—	—	—	710,360	—	710,360
Snail, sea	13,724	—	—	—	—	13,724	—	13,724
Squid, market	20,306,005	—	—	—	—	20,306,005	—	20,306,005
Miscellaneous mollusk	1,145	—	—	—	—	1,145	—	1,145
Total pounds	467,449,270	195,655	430,205,633	387,405	2,729,252	900,967,215	146,794,777	1,047,761,992

* For origin of shipments refer to Table 6. Beginning in 1965 only tuna shipments are recorded.

TABLE 8

Monthly Landings and Shipments Into California during 1976

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total Pounds
LANDINGS:													
Fish:													
Anchovy, Northern	39,704,500	3,417,096	23,364,456	35,770,328	3,633,770	254,010	383,330	938,500	15,063,235	22,127,500	60,042,632	45,139,350	249,838,707
Barracuda, California	24,305	10,350	9	8,319	31,025	32,993	16,109	6,307	744	1,368	3,281	27,281	162,091
Bonito, Pacific	2,850	14,762	13,004	33,500	81,363	155,570	2,228,308	3,910,464	1,860,921	326,316	188,902	80,899	8,896,859
Butterfish, Pacific	1,532	6,209	11,908	7,788	2,793	3,306	16,276	4,429	1,037	3,702	3,657	5,730	68,367
Cabezon	2,887	2,582	1,168	838	1,008	1,235	731	595	649	1,019	4,276	2,178	19,166
Croker, white	45,806	61,125	45,367	37,219	27,090	60,516	27,622	38,968	55,386	34,225	29,557	35,080	497,961
Dolphinfish	—	298	832	—	407	—	237	1,348	3,943	1,177	1,439	235	9,916
Eel	—	—	31	163	614	165	—	11	65	3	—	—	1,052
Flounder	79,012	79,999	79,938	13,962	44,400	87,741	94,719	204,524	258,455	151,756	68,875	18,356	1,181,737
Flounder, arrowtooth	7,456	5,805	6,124	9,747	33,985	23,442	25,532	16,656	12,211	16,289	19,473	8,508	185,228
Flyingfish	—	—	—	150	11,470	39,343	31,194	16,015	4	—	—	—	98,176
Genadiers	4,618	212	1,519	304	12,278	9,490	2,590	32,374	11,408	7,716	3,728	5,816	92,053
Grouper	5,840	—	3,760	—	—	—	—	—	—	—	—	—	9,600
Hake, Pacific	4,725	1,200	815	2,031	6,493	8,578	190	575	—	3,049	430	435	28,521
Halfmoon	21	—	—	42	35	2,203	1,955	1,321	13,914	498	2,270	3,917	26,176
Halibut, California	44,689	47,970	51,659	18,118	21,614	62,494	88,828	79,171	55,228	53,006	60,524	45,099	628,400
Herring, Pacific	2,363,771	1,910,681	381,271	—	—	35,821	75,840	—	15	—	—	52,292	4,819,691
Lingcod	120,828	95,428	124,675	177,079	416,904	523,901	410,231	477,040	245,226	218,560	188,372	122,046	3,120,290
Mackerel, jack	6,260,359	6,101,519	4,502,952	2,936,239	2,761,158	2,582,506	4,822,751	4,607,084	2,308,977	1,696,239	3,195,856	3,117,441	44,893,081
Mackerel, Pacific	3,078	—	2,237	1,832	8,788	31,593	71,098	23,135	18,360	14,159	11,155	168,294	353,729
Mullet	—	—	—	—	513	1,028	1,154	—	612	—	—	—	3,307
Opah	—	—	—	—	—	—	—	2,320	138	—	—	—	2,458
Perch	10,128	11,369	19,973	28,187	2,433	2,158	11,480	21,132	9,089	5,561	7,117	13,410	142,037
Queenfish	1,665	980	1,540	60	715	2,005	2,219	605	90	915	940	1,180	12,914
Rockfish	2,210,499	1,750,969	1,632,575	1,634,477	2,204,056	2,482,858	2,269,898	2,272,639	1,858,960	2,236,729	1,954,025	2,095,494	24,603,179
Sablefish	1,443,310	681,148	851,904	717,301	1,010,038	1,116,554	1,108,236	1,297,327	1,271,542	1,455,864	1,184,672	1,193,365	13,331,261
Salmon	—	—	—	465,896	1,932,912	2,770,715	1,787,824	583,761	244,695	485	—	—	7,786,288
Sandab	110,590	80,953	110,290	95,304	123,041	117,477	165,704	179,482	125,300	76,361	69,996	39,374	1,293,872
Sardine, Pacific	—	—	—	—	—	13,750	2,440	—	—	—	—	—	16,190
Sculpin	739	780	1,620	1,791	1,372	65,880	56,923	30,343	4,126	3,497	5,511	1,093	173,675
Sea bass, giant	12,355	5,255	5,045	4,827	15,252	657	1,653	861	1,098	648	3,110	5,367	56,128
Seabass, white	79,721	91,466	47,708	38,541	86,263	173,910	319,378	55,154	14,671	32,281	76,469	43,111	1,058,673
Shark	73,531	40,673	37,122	33,294	49,232	87,865	121,635	74,335	67,402	82,049	107,795	87,271	862,204
Sheephead, California	8	685	325	265	779	966	1,316	345	456	659	595	1,926	8,325
Skate	15,306	7,789	9,866	12,369	22,961	17,393	9,953	19,053	18,293	15,489	8,499	4,166	161,137
Smelt, top or jack	163	—	120	651	296	104	73	—	—	30	4,094	5,725	11,256
Smelt, true	8,010	11,797	4,296	4,137	35,706	120,761	59,787	56,569	60,230	8,592	4,605	1,673	376,163
Smelt, whitebait	684	13,950	32,522	62,321	43,689	76,405	16,548	4,699	435	—	—	—	251,253
Sole, Dover	831,985	749,358	1,646,182	1,707,043	2,193,294	2,639,295	2,589,560	3,139,949	2,007,773	2,298,915	1,720,494	1,232,964	22,756,812
Sole, English	559,462	297,205	334,283	343,407	234,285	160,043	207,109	523,294	434,846	458,844	363,729	366,491	4,282,998
Sole, petrale	684,338	188,014	206,599	213,651	245,193	175,845	172,500	218,704	189,716	201,965	211,882	269,150	2,977,557
Sole, rex	353,058	184,661	150,039	120,276	146,071	154,337	95,342	166,942	159,649	174,929	151,046	156,470	2,012,820
Sole, sand	19,875	24,262	16,046	12,045	15,555	10,442	7,556	47,393	31,712	39,798	13,099	11,714	249,497
Sole, miscellaneous	7,435	3,879	2,263	404	1,875	1,742	1,281	2,510	740	5,540	5,284	18,488	45,450

Tuna, albacore	136,697	206,497	61,082	—	223	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Tuna, bigeye	—	816,846	822,365	—	—	—	204	—	141,731	—	41,540	37,280	1,859,966
Tuna, bluefin	309	562,222	486,005	312,150	7,304	2,389,846	1,666,579	4,417,557	6,497,756	1,633,692	739,597	76,428	18,789,445
Tuna, skipjack	5,199,073	5,025,299	28,920,244	10,398,465	20,265,532	16,608,064	9,006,644	2,909,292	4,416,487	5,041,692	8,962,154	5,941,106	122,694,052
Tuna, skipjack, black	—	4,515	179,460	—	49,495	1,935	251,955	—	—	—	122,213	320,887	930,460
Tuna, Yellowfin	2,970,907	7,589,265	58,143,848	12,901,803	24,666,153	31,572,077	34,298,049	23,751,518	24,924,565	20,987,883	22,100,966	12,157,576	276,064,610
Turbot	6,028	2,135	2,369	2,597	3,981	660	1,810	2,464	3,509	826	1,301	1,910	29,590
Wahoo	1,410	—	3,958	—	5,100	—	—	333	79	46	49	1,600	12,575
Yellowtail	77,983	44,241	10,561	1,100	14,053	16,556	116,537	24,146	51,014	18,421	60,861	40,458	475,931
Miscellaneous	735	164	53	141	366	823	148	208	53	261	672	610	4,234
Crustacean:													
Crab, Dungeness	4,991,092	2,763,656	3,365,697	2,146,099	1,268,700	484,826	142,697	36,632	—	2,040	378,947	146,388	15,726,774
Crab, pelagic red	—	32,000	—	—	—	—	—	—	—	—	—	—	32,000
Crab, rock	105,562	102,418	91,042	77,669	81,605	74,272	114,789	112,642	101,790	120,626	114,206	131,145	1,227,766
Lobster, California spiny	37,924	29,481	18,749	—	—	—	—	—	—	96,095	66,148	44,137	292,534
Prawn, ridgeback	371	—	8	682	935	786	89	—	259	—	—	—	3,130
Prawn, spot	14,248	21,107	1,067	411	552	1,429	6,440	6,628	4,656	7,843	16,272	31,416	112,069
Shrimp, Pacific Ocean	—	13	—	124,870	179,606	568,705	598,515	525,552	375,182	1,128,325	20	—	3,500,788
Miscellaneous crustacean	1	41	228	510	95	332	273	30	—	—	—	70	1,580
Echinoderm:													
Sea urchin	1,540,386	644,891	607,871	499,497	553,110	599,753	611,569	702,722	994,416	1,459,897	1,338,250	1,554,064	11,106,426
Mollusk:													
Abalone, black	34,481	—	30,493	12,925	7,139	70,412	84,280	—	41,255	25,861	22,826	27,079	356,751
Abalone, green	17,858	—	12,911	5,842	9,951	13,243	12,829	—	10,462	11,813	11,527	14,053	120,489
Abalone, pink	84,791	—	36,934	39,840	54,127	40,728	45,985	281	29,547	35,470	33,017	30,423	431,143
Abalone, red	110,072	—	65,420	47,094	59,928	67,452	84,632	124	55,374	94,986	60,677	93,862	739,621
Abalone, threaded	350	—	428	142	522	399	120	—	64	146	306	430	2,907
Abalone, white	16,098	—	4,309	6,783	9,360	6,206	11,558	—	8,821	3,376	9,199	6,197	81,907
Mussel	250	1,345	719	—	—	—	—	—	—	—	—	43	2,357
Octopus	6,537	4,291	3,993	3,063	3,636	4,718	5,071	7,724	8,700	10,899	8,517	14,469	81,618
Oyster, Eastern	571	438	507	445	507	476	484	484	510	490	499	585	5,996
Oyster, giant Pacific	56,046	53,524	49,377	61,544	66,319	46,265	45,877	44,974	45,836	53,538	84,329	102,731	710,360
Snail, sea	546	770	900	670	1,345	1,059	1,282	1,673	1,221	1,030	1,554	1,674	13,724
Squid, market	5,988,296	2,360,903	50,135	751,055	635,185	1,964,614	879,514	240,862	947,859	1,512,441	1,574,538	3,400,603	20,306,005
Miscellaneous mollusk	133	—	216	52	29	21	32	—	305	335	8	14	1,145
Total Pounds	76,497,894	36,171,540	126,672,992	71,909,355	63,405,584	68,713,821	66,881,303	60,908,198	75,309,292	68,226,143	107,068,682	79,202,411	900,967,215
SHIPMENTS:*													
Fish:													
Tuna, albacore	954,518	422,951	2,587,518	2,566,283	1,062,485	3,108,771	6,683,474	7,864,597	2,710,461	1,893,525	3,742,322	10,488,966	44,085,871
Tuna, bigeye	—	—	—	—	—	—	—	—	—	—	87,433	62,805	150,238
Tuna, bluefin	—	—	—	—	—	—	—	—	—	—	—	110,096	1,780,745
Tuna skipjack	3,908,781	4,949,379	3,072,696	2,538,455	8,483,829	3,918,712	2,455,470	5,182,861	1,670,649	9,514,140	6,283,026	18,947,780	75,913,966
Tuna, skipjack, black	—	—	—	325,118	—	—	—	—	6,658,837	—	18,182	69,356	412,656
Tuna, yellowfin	1,937,385	1,292,708	1,771,479	3,026,222	719,901	1,158,550	3,109,608	2,032,863	2,294,184	2,440,698	2,043,573	2,624,130	24,451,301
Total Pounds	6,800,684	6,665,038	7,431,693	8,456,078	10,266,215	8,186,033	12,248,552	15,080,321	13,334,131	13,848,363	12,174,536	32,303,133	146,794,777
GRAND TOTAL	83,298,578	42,836,578	134,104,685	80,365,433	73,671,799	76,899,854	79,129,855	75,988,519	88,643,423	82,074,506	119,243,218	111,505,544	1,047,761,992

* For origin of shipments refer to Table 6. Beginning in 1965 only tuna shipments are recorded.

TABLE 9

Monthly Landings of Commercial Fishing Boats in the Eureka Area during 1976

Species	*January*	*February*	*March*	*April*	*May*	*June*	*July*	*August*	*September*	*October*	*November*	*December*	*Total Pounds*
LANDINGS FROM:													
California waters:													
Fish:													
Cabezon	—	—	—	—	—	—	—	—	—	2	—	14	16
Croaker, white	—	—	—	—	—	—	—	—	502	—	—	—	502
Eel	—	—	—	—	25	105	—	—	—	—	—	—	130
Flounder	9,859	6,094	31,137	3,253	26,279	75,596	77,052	107,493	173,403	82,931	48,628	10,439	652,164
Flounder, arrowtooth	6,876	5,805	4,744	9,637	33,985	23,112	24,477	16,656	12,211	16,224	19,473	8,508	181,708
Grenadiers	4,618	212	1,179	304	12,278	9,490	2,590	32,374	11,408	7,716	3,728	5,816	91,713
Hake, Pacific	—	—	—	—	—	—	—	—	—	770	—	—	770
Halibut, California	—	—	—	—	—	—	—	80	—	50	—	—	130
Herring, Pacific	17,776	5,358	—	—	—	—	—	—	—	—	—	2,100	25,234
Lingcod	53,226	29,980	34,591	57,995	160,876	175,996	220,383	321,707	161,862	171,203	111,718	60,931	1,560,468
Mackerel, jack	—	—	—	—	—	—	298	1,455	6,580	1,540	—	—	9,873
Perch	656	1,157	8,633	18,104	1,170	574	6,460	12,433	3,287	—	163	392	53,029
Rockfish	801,683	327,618	313,479	363,557	815,323	1,049,984	1,041,022	1,333,407	841,269	1,038,515	810,888	981,931	9,718,676
Sablefish	404,168	191,813	273,497	253,414	376,577	487,947	523,299	710,443	460,135	612,169	476,151	458,277	5,227,890
Salmon	—	—	—	35,841	1,080,233	1,997,135	1,394,503	260,796	61,834	—	—	—	4,830,342
Sanddab	31,000	25,099	37,703	34,472	31,121	47,014	61,504	100,759	60,284	45,037	29,698	16,326	520,017
Shark	3,744	2,138	298	14	876	80	247	477	9,871	11,302	3,563	7,021	39,631
Skate	7,250	875	2,285	1,835	9,745	3,692	880	11,901	5,965	1,887	45	100	46,460
Smelt, true	—	223	—	679	28,485	109,724	55,874	54,057	59,697	—	—	—	308,739
Smelt, whitebait	684	11,768	29,262	55,955	38,309	74,343	15,021	4,029	—	—	—	—	229,371
Sole, Dover	698,831	510,817	1,105,564	1,418,746	1,836,344	2,100,161	2,015,611	2,627,610	1,655,727	1,888,544	1,387,122	978,656	18,223,733
Sole, English	189,439	130,299	226,897	222,513	135,038	73,961	104,511	291,408	239,958	229,415	129,464	93,295	2,066,198
Sole, petrale	371,371	75,892	80,275	74,281	122,875	59,500	47,015	85,970	58,021	101,318	94,696	114,890	1,286,104
Sole, rex	238,539	109,475	104,490	94,481	129,091	129,614	78,715	134,912	110,888	125,998	87,884	66,274	1,410,361
Sole, sand	5,019	5,597	6,264	4,309	8,091	8,445	3,577	4,503	16,141	15,733	7,206	6,896	91,781
Sole, miscellaneous	—	118	—	—	944	6	—	—	34	6,170	2,882	8,179	18,333
Tuna, albacore	—	—	—	—	—	5,092	124,805	2,079,769	1,902,110	743,667	52,855	9,699	4,917,997
Turbot	2,009	513	35	—	2,592	342	966	468	1,327	111	235	120	8,718
Miscellaneous	454	—	—	—	70	126	16	42	26	—	—	—	734

Crustacean:													
Crab, Dungeness	4,953,908	2,720,544	3,323,425	2,132,101	1,250,855	457,845	142,456	36,632	—	—	—	6,043	15,023,809
Shrimp, Pacific Ocean	—	—	—	111,681	156,704	568,654	598,392	525,552	375,182	1,128,325	—	—	3,464,490
Echinoderm:													
Sea urchin	—	—	—	—	—	—	—	—	—	—	27,949	46,902	74,851
Mollusk:													
Octopus	6,177	3,770	3,709	2,855	3,217	4,310	3,742	6,954	8,027	9,435	7,373	13,432	73,001
Oyster, giant Pacific	41,242	43,833	39,193	45,687	46,436	28,084	22,202	20,375	25,594	32,564	51,145	70,312	466,667
Snail, sea	—	—	—	—	—	—	—	—	—	—	81	508	589
Miscellaneous mollusk	—	—	162	—	—	—	—	—	—	—	—	—	162
Total Pounds	7,848,529	4,208,998	5,626,822	4,941,714	6,307,549	7,490,932	6,565,618	8,782,262	6,261,343	6,270,626	3,352,947	2,967,061	70,624,391
Waters north of State:													
Fish:													
Halibut, California	—	—	—	—	—	—	30	—	—	—	—	—	30
Lingcod	—	—	—	—	70	—	—	—	—	—	—	—	70
Rockfish	—	—	—	115	490	—	40	—	—	—	—	—	645
Salmon	—	—	—	—	—	—	7,709	2,052	—	—	—	—	9,761
Sole, petrale	—	—	—	—	26	—	—	—	—	—	—	—	26
Crustacean:													
Shrimp, Pacific Ocean	—	—	—	12,084	21,810	—	—	—	—	—	—	—	33,894
Mollusk:													
Octopus	—	—	—	—	36	—	—	—	—	—	—	—	36
Total Pounds	—	—	—	12,199	22,432	—	7,779	2,052	—	—	—	—	44,462
Grand Total	7,848,529	4,208,998	5,626,822	4,953,913	6,329,971	7,490,932	6,573,397	8,784,314	6,261,343	6,270,626	3,352,947	2,967,061	70,668,853

TABLE 10

Monthly Landings of Commercial Fishing Boats in the San Francisco Area during 1976

Species	*January*	*February*	*March*	*April*	*May*	*June*	*July*	*August*	*September*	*October*	*November*	*December*	*Total Pounds*
LANDINGS FROM:													
California waters:													
Fish:													
Anchovy, northern	6,000	—	—	53,300	127,570	104,080	69,150	74,830	106,750	31,800	63,500	—	634,000
Bonito, Pacific	—	—	—	—	—	—	—	13	104	—	—	—	117
Cabezon	—	—	329	—	—	120	—	185	224	—	—	128	986
Croaker, white	2,394	2,524	4,334	1,771	4,335	6,022	4,302	7,891	6,413	3,649	350	2,907	46,892
Eel	—	—	—	—	—	—	—	—	10	—	—	—	10
Flounder	42,101	55,742	31,143	3,019	4,552	4,080	5,940	75,820	72,745	60,115	12,813	1,610	369,680
Flounder, arrowtooth	580	—	1,380	110	—	330	1,055	—	—	65	—	—	3,520
Grenadiers	—	—	340	—	—	—	—	—	—	—	—	—	340
Hake, Pacific	—	—	—	—	50	160	—	—	—	—	—	—	210
Halibut, California	6,905	9,259	4,051	862	298	170	1,003	4,773	2,143	5,083	1,367	2,218	38,132
Herring, Pacific	2,236,495	1,692,323	381,271	—	—	—	—	—	—	—	—	50,192	4,360,281
Lingcod	40,286	40,736	41,003	55,420	152,248	213,990	118,187	97,472	44,974	28,699	47,968	36,602	917,585
Mackerel, jack	—	—	—	—	—	—	—	350	700	—	—	—	1,050
Perch	6,602	7,262	6,635	5,649	—	—	1,407	2,093	1,432	2,533	2,763	6,744	43,120
Rockfish	286,357	290,506	156,757	157,581	143,036	330,238	154,220	161,892	156,372	204,996	250,208	144,081	2,436,244
Sablefish	42,700	39,185	66,573	34,685	24,380	47,096	44,271	45,347	49,115	147,805	127,011	73,801	741,969
Salmon	—	—	—	244,926	489,443	513,021	230,609	117,945	129,043	485	—	—	1,725,472
Sanddab	75,174	47,700	67,236	47,346	72,862	49,727	87,515	63,120	38,820	22,420	30,184	17,383	619,487
Seabass, white	—	—	—	—	—	—	—	36	39	283	—	633	991
Shark	19,667	13,976	4,711	155	626	4,055	8,874	17,175	11,086	25,174	6,477	16,421	128,397
Skate	510	400	200	—	175	—	1,575	1,705	1,300	1,216	300	600	7,981
Smelt, top or jack	—	—	120	32	—	—	—	—	—	—	—	—	152
Smelt, true	1,424	515	498	3,275	5,966	9,289	3,654	845	110	42	—	—	25,618
Smelt, whitebait	—	2,182	3,260	6,366	5,380	2,062	1,527	670	—	—	—	—	21,447
Sole, Dover	128,109	216,876	461,710	195,431	200,042	234,182	217,858	229,091	192,557	281,899	206,329	172,783	2,736,867
Sole, English	257,071	67,679	43,807	43,246	37,211	49,630	70,800	195,649	124,893	124,293	120,589	171,209	1,306,077
Sole, petrale	249,380	60,901	71,926	67,270	37,833	59,409	82,025	72,071	43,364	53,359	72,173	125,239	994,950
Sole, rex	48,681	41,551	26,543	15,619	6,601	16,544	9,034	26,622	36,696	35,027	41,137	65,598	369,653
Sole, sand	12,619	16,630	8,514	3,603	1,665	510	3,290	42,755	15,310	23,470	4,140	4,345	136,851
Sole, miscellaneous	5,717	1,345	415	—	—	105	170	1,732	120	420	805	2,025	12,854
Swordfish	—	—	—	—	—	—	—	489	—	—	—	—	489
Tuna, albacore	115	—	—	—	—	—	66,160	979,283	1,220,827	585,530	320,097	17,844	3,189,856
Turbot	1,432	757	1,329	680	—	—	90	1,950	1,525	75	165	297	8,300
Miscellaneous	116	47	51	30	55	51	29	42	27	124	30	67	669

Crustacean:													
Crab, Dungeness	36,700	39,355	37,738	13,238	17,024	25,072	50	—	—	2,040	376,565	137,873	685,655
Crab, rock	—	—	—	—	—	—	—	—	44	—	40	—	84
Prawn, spot	—	—	—	20	—	—	—	—	—	—	—	—	20
Shrimp, Pacific Ocean	—	—	—	495	—	—	—	—	—	—	—	—	495
Miscellaneous crustacean	—	40	105	10	95	332	273	—	—	—	—	70	925
Echinoderm:													
Sea urchin	1,300	1,336	3,431	2,817	—	635	575	1,481	330	1,225	1,375	5,437	19,942
Mollusk:													
Abalone, red	3,355	—	3,917	3,141	4,392	9,275	12,180	—	8,531	7,310	2,240	8,612	62,953
Abalone, threaded	—	—	—	—	—	—	—	—	—	2	—	10	12
Mussel	250	1,345	719	—	—	—	—	—	—	—	—	43	2,357
Octopus	265	284	245	120	180	163	691	592	435	281	319	406	3,981
Oyster, eastern	571	438	507	445	507	476	484	484	510	490	499	585	5,996
Oyster, giant Pacific	13,396	9,235	9,704	15,857	19,883	18,181	23,675	24,589	20,242	20,974	33,184	32,419	241,349
Snail, sea	—	—	—	—	—	—	—	—	—	—	—	81	81
Miscellaneous mollusk	—	—	—	—	—	—	—	—	—	321	—	—	321
Total Pounds	3,526,272	2,660,129	1,440,502	976,519	1,356,409	1,696,005	1,220,673	2,249,022	2,286,791	1,671,205	1,722,628	1,098,263	21,904,418
Waters north of State:													
Fish:													
Salmon	—	—	—	—	—	—	—	7	—	—	—	—	7
Tuna, albacore	—	—	—	—	—	—	—	65,925	16,016	—	—	—	81,941
Total Pounds	—	—	—	—	—	—	—	65,932	16,016	—	—	—	81,948
Grand Total	3,526,272	2,660,129	1,440,502	976,519	1,356,409	1,696,005	1,220,673	2,314,954	2,302,807	1,671,205	1,722,628	1,098,263	21,986,366

TABLE 11

Monthly Landings of Commercial Fishing Boats in the Monterey Area during 1976

Species	*January*	*February*	*March*	*April*	*May*	*June*	*July*	*August*	*September*	*October*	*November*	*December*	*Total Pounds*
LANDINGS FROM:													
California Waters:													
Fish:													
Anchovy, northern	1,221,000	347,500	490,000	83,700	3,800	19,280	—	701,470	1,143,740	434,000	3,457,332	2,048,200	9,950,022
Bonito, Pacific	—	—	—	—	—	—	—	—	78	13	15	179	285
Butterfish, Pacific	—	—	35	907	1,484	723	30	—	—	26	450	—	3,655
Cabezon	34	311	259	—	60	—	104	225	150	113	211	413	1,880
Croaker, white	10,622	4,667	634	4,999	2,623	2,504	4,967	452	18,804	10,444	13,546	13,194	87,456
Eel	—	—	—	—	—	—	—	—	45	3	—	—	48
Flounder	25,199	14,366	10,400	3,829	12,593	6,842	6,481	19,718	11,385	6,965	3,465	3,335	124,578
Hake, Pacific	4,040	425	400	1,600	—	1,000	190	575	—	—	—	—	8,230
Halibut, California	2,716	2,136	5,467	439	3,348	4,723	3,533	10,737	2,073	734	580	326	36,812
Herring, Pacific	109,500	213,000	—	—	—	35,821	75,840	—	—	—	—	—	434,161
Lingcod	10,466	8,230	16,370	18,813	14,861	42,012	16,745	6,354	4,698	5,751	10,269	8,361	162,930
Mackerel, jack	—	—	—	—	—	6,860	2,043	9,100	5,860	—	84,515	—	108,378
Mackerel, Pacific	—	—	—	—	—	—	—	—	4,600	—	—	—	4,600
Opah	—	—	—	—	—	—	—	2,296	138	—	—	—	2,434
Perch	193	138	286	214	—	—	56	—	—	—	—	—	887
Rockfish	486,248	394,211	583,549	553,618	494,052	448,723	413,073	198,004	185,079	447,743	307,494	320,628	4,832,422
Sablefish	987,766	440,167	489,017	390,813	572,657	524,134	506,778	527,662	750,847	688,003	576,784	660,623	7,115,251
Salmon	—	—	—	160,999	323,459	227,484	117,138	143,278	36,883	—	—	—	1,009,241
Sanddab	4,170	8,055	5,184	12,746	18,552	19,328	15,941	15,203	25,747	8,522	9,713	5,195	148,356
Seabass, white	52	53	—	—	156	—	1,187	325	840	833	621	91	4,158
Shark	12,885	4,002	2,314	606	1,324	11,788	5,665	7,019	7,070	12,650	22,740	6,359	94,422
Skate	6,090	5,361	6,439	10,449	13,027	12,004	7,066	5,339	11,028	12,198	8,027	3,466	100,494
Smelt, top or jack	—	—	—	284	171	104	—	—	—	30	260	—	849
Smelt, true	6,216	11,014	3,783	133	246	88	—	1,612	368	—	290	—	23,750
Smelt, whitebait	—	—	—	—	—	—	—	—	435	—	—	—	435

Sole, Dover	4,250	19,735	70,965	73,919	128,029	253,988	332,036	247,243	146,979	127,503	127,043	81,525	1,613,215
Sole, English	28,603	29,143	29,561	43,220	29,071	24,165	20,040	17,305	36,090	42,663	72,026	64,580	436,467
Sole, petrale	20,464	23,647	27,853	25,684	21,444	25,104	8,717	5,828	13,676	15,900	21,850	12,680	222,847
Sole, rex	51,938	25,776	12,919	2,101	1,489	892	1,535	685	7,575	7,145	13,707	20,280	146,042
Sole, sand	1,361	1,089	636	2,108	2,644	948	92	—	—	—	265	70	9,213
Sole, Miscellaneous	—	—	435	28	142	397	—	110	39	85	144	80	1,460
Swordfish	—	—	—	—	—	—	—	856	2,238	590	—	—	3,684
Tuna, albacore	—	—	—	—	—	—	170,781	3,074,648	1,721,981	308,257	190,108	13,186	5,478,961
Tuna, skipjack	—	—	—	—	—	—	—	—	1,038	115	—	—	1,153
Turbot	—	—	—	60	—	—	—	—	—	285	—	—	345
Miscellaneous	—	—	2	—	200	—	45	66	—	4	170	—	487
Crustacean:													
Crab, Dungeness	—	—	—	—	—	—	—	—	—	—	1,125	—	1,125
Prawn, spot	5,347	1,914	1,067	188	—	—	—	—	2,503	3,842	3,935	4,680	23,476
Mollusk:													
Abalone, red	844	—	—	—	—	135	236	—	150	—	—	—	1,365
Octopus	89	155	—	—	93	209	611	27	194	1,072	758	512	3,722
Squid, market	—	50	—	50,300	472,285	852,987	25,000	230,200	897,680	1,512,030	979,485	1,800	5,021,817
Total pounds	3,000,093	1,555,145	1,757,575	1,441,757	2,117,812	2,522,243	1,735,930	5,226,337	5,040,011	3,647,519	5,906,928	3,269,763	37,221,113
Waters north of State:													
Fish:													
Tuna, albacore	—	—	—	—	—	—	—	17,770	—	—	—	—	17,770
Total pounds	—	—	—	—	—	—	—	17,770	—	—	—	—	17,770
Grand Total	3,000,093	1,555,145	1,757,575	1,441,757	2,117,812	2,522,243	1,735,930	5,244,107	5,040,011	3,647,519	5,906,928	3,269,763	37,238,883

TABLE 12

Monthly Landings of Commercial Fishing Boats in the Santa Barbara Area during 1976

Species	*January*	*February*	*March*	*April*	*May*	*June*	*July*	*August*	*September*	*October*	*November*	*December*	*Total Pounds*
LANDINGS FROM:													
California waters:													
Fish:													
Anchovy, northern	6,247,900	150,750	22,956	2,117,100	204,500	30,900	123,978	84,600	3,741,700	7,345,900	11,273,600	7,284,200	38,628,084
Barracuda, California	8,900	—	—	—	—	—	146	95	408	1,013	5	—	10,567
Bonito, Pacific	—	—	—	—	—	180	66,768	55,122	20,853	279	418	1,367	144,987
Butterfish, Pacific	18	—	42	16	27	—	—	2,388	50	—	—	5	2,546
Cabezon	2,853	2,271	580	838	948	1,115	627	185	275	904	4,056	1,623	16,275
Croaker, white	10,175	6,137	5,817	9,079	11,386	9,482	14,432	19,670	10,229	8,866	12,788	9,826	127,887
Dolphinfish	—	—	—	—	—	—	—	—	38	—	—	—	38
Eel	—	—	31	163	589	60	—	11	10	—	—	—	864
Flounder	1,853	3,797	7,258	3,861	976	1,223	5,242	1,477	873	1,724	3,959	2,972	35,215
Hake, Pacific	—	—	—	271	5,823	2,853	—	—	—	344	—	—	9,291
Halibut, California	20,213	19,359	20,589	6,492	9,103	48,206	70,217	49,746	34,632	39,105	53,410	35,099	406,171
Herring, Pacific	—	—	—	—	—	—	—	—	15	—	—	—	15
Lingcod	16,850	16,347	32,689	44,615	88,699	91,756	54,835	51,366	33,675	12,897	18,404	15,996	478,129
Mackerel, jack	33,000	486,500	751,520	889,650	865,500	73,863	6	528,318	110	55,300	71,690	218,100	3,973,557
Mackerel, Pacific	—	—	—	—	—	—	—	298	208	1,510	226	—	2,242
Opah	—	—	—	—	—	—	—	24	—	—	—	—	24
Perch	2,167	1,091	3,294	3,033	443	118	1,949	3,822	2,619	2,364	2,134	3,447	26,481
Queenfish	—	—	—	—	—	—	34	—	—	—	—	—	34
Rockfish	382,800	569,674	396,294	399,545	604,592	547,935	573,763	502,774	573,010	388,133	439,256	466,154	5,843,930
Sablefish	5,989	7,180	19,056	35,271	32,663	53,149	31,350	9,148	8,305	6,287	4,406	664	213,468
Salmon	—	—	—	24,130	39,224	32,774	37,842	59,683	16,924	—	—	—	210,577
Sanddab	246	99	142	728	443	1,408	744	400	449	382	347	355	5,743
Sculpin	3	—	—	—	—	—	—	—	—	50	—	—	53
Sea bass, giant	—	—	—	46	—	96	166	—	—	—	663	—	971
Seabass, white	373	1,553	397	987	1,798	7,740	2,806	1,718	3,166	2,501	1,483	102	24,624
Shark	8,400	6,395	3,710	11,631	21,255	28,256	46,921	20,221	25,167	14,428	39,865	15,282	241,531
Sheephead, California	—	56	—	—	305	228	273	—	258	164	132	76	1,492
Skate	1,456	1,153	924	85	14	1,697	432	108	—	188	127	—	6,184
Smelt, top or jack	—	—	—	—	—	—	73	—	—	—	—	—	73
Smelt, true	—	—	—	—	—	—	1	—	—	—	—	—	1
Sole, Dover	795	1,680	7,458	18,612	28,644	50,389	24,055	36,005	12,470	969	—	—	181,077
Sole, English	80,834	67,779	33,123	33,548	31,815	11,457	11,745	18,932	33,445	57,683	40,175	36,162	456,698
Sole, petrale	43,002	27,200	26,379	45,798	62,531	31,227	34,743	54,835	74,540	31,373	23,130	16,311	471,069
Sole, rex	12,210	7,354	4,767	7,250	8,130	6,402	6,058	4,723	4,215	5,614	7,888	3,513	78,124
Sole, sand	876	946	632	2,025	3,155	539	597	135	261	595	1,488	403	11,652

Sole, miscellaneous	1,487	2,328	1,211	255	618	1,225	961	453	409	776	1,379	92	11,194
Swordfish	—	—	—	—	—	571	474	531	331	6,797	2,100	333	11,137
Tuna, albacore	5,932	—	—	—	—	1,773	9,761	564,285	600,738	368,304	95,761	84,794	1,731,348
Tuna, skipjack	—	—	—	—	—	—	—	—	—	116	130	—	246
Turbot	2,587	865	1,005	1,857	1,389	318	753	46	657	355	901	1,493	12,226
Yellowtail	—	—	—	—	42	17	9	—	—	45	953	—	1,066
Miscellaneous	—	—	—	111	41	—	58	—	—	1	—	42	253
Crustacean:													
Crab, Dungeness	484	3,757	4,534	760	821	1,909	191	—	—	—	1,257	2,472	16,185
Crab, rock	57,823	58,051	45,617	34,443	34,486	28,802	44,583	43,757	40,804	64,159	59,470	66,897	578,892
Lobster, California spiny	20,940	15,098	5,316	—	—	—	—	—	—	15,018	13,974	11,028	81,374
Prawn, ridgeback	371	—	8	682	935	786	89	—	259	—	—	—	3,130
Prawn, spot	8,901	19,193	—	203	592	1,429	6,440	6,628	2,153	4,001	12,337	26,736	88,573
Shrimp, Pacific Ocean	—	13	—	610	1,092	51	123	—	—	—	20	—	1,909
Miscellaneous crustacean	1	1	123	500	—	—	—	30	—	—	—	—	655
Echinoderm:													
Sea urchin	1,492,786	625,535	596,920	496,105	553,110	597,055	606,760	683,910	932,666	1,354,811	1,201,035	1,331,870	10,472,563
Mollusk:													
Abalone, black	28,455	—	25,995	11,927	4,786	56,070	59,643	—	31,518	20,231	8,955	19,799	267,379
Abalone, green	128	—	74	20	12	158	120	—	68	54	334	263	1,231
Abalone, pink	24,913	—	16,628	20,665	20,448	15,328	21,474	275	13,758	19,262	17,721	11,240	181,712
Abalone, red	98,755	—	58,531	41,842	47,690	47,552	64,419	124	41,450	79,642	50,446	73,834	604,275
Abalone, threaded	309	—	366	137	435	359	112	—	61	129	288	414	2,610
Abalone, white	467	—	143	12	21	135	720	—	372	329	560	187	2,946
Octopus	6	82	39	88	108	—	27	151	44	111	15	106	777
Oyster, giant Pacific	1,408	456	480	—	—	—	—	—	—	—	—	—	2,344
Squid, market	1,400,400	128,200	11,810	528,655	118,150	521,400	473	1,529	58	—	53	678,208	3,388,936
Miscellaneous mollusk	24	—	49	52	20	14	32	—	30	14	8	14	257
Total Pounds	10,027,090	2,230,900	2,106,507	4,793,698	2,807,309	2,308,005	1,927,025	2,807,523	6,263,281	9,912,728	13,467,347	10,421,479	69,072,892
Waters south of State:													
Fish:													
Tuna, albacore	—	—	1,379	—	—	—	—	—	275	—	—	—	1,654
Total pounds	—	—	1,379	—	—	—	—	—	275	—	—	—	1,654
Grand Total	10,027,090	2,230,900	2,107,886	4,793,698	2,807,309	2,308,005	1,927,025	2,807,523	6,263,556	9,912,728	13,467,347	10,421,479	69,074,546

TABLE 13

Monthly Landings of Commercial Fish into the Los Angeles Area during 1976

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total Pounds
LANDINGS FROM:													
California waters:													
Fish:													
Anchovy, northern	32,229,600	2,918,768	22,851,500	33,516,228	3,297,900	102,700	190,202	77,580	10,070,965	14,315,800	45,248,200	35,806,950	200,626,393
Barracuda, California	15,291	10,336	9	7,427	29,576	26,468	12,589	5,178	253	70	3,248	27,267	137,712
Bonito, Pacific	2,501	65	335	185	74,906	148,375	1,372,046	1,198,543	375,778	313,800	155,447	58,620	3,700,601
Butterfish, Pacific	1,514	6,209	11,831	6,865	1,282	2,583	16,246	1,916	564	3,616	3,207	5,591	61,424
Cabezon	—	—	—	—	—	—	—	—	—	—	9	—	9
Croaker, white	21,743	47,712	34,418	21,090	8,701	42,508	3,541	10,240	19,362	11,261	2,840	8,762	232,178
Dolphinfish	—	—	—	—	—	—	—	—	—	129	—	—	129
Flounder	—	—	—	—	—	—	4	16	49	21	8	—	98
Flyingfish	—	—	—	150	11,470	39,343	31,194	16,015	4	—	—	—	98,176
Hake, Pacific	685	775	415	160	620	4,565	—	—	—	1,935	430	435	10,020
Halfmoon	—	—	—	—	—	924	740	337	70	—	1,709	3,288	7,068
Halibut, California	8,924	10,963	10,244	7,733	5,082	7,478	11,619	11,579	15,859	6,121	4,218	2,388	102,208
Lingcod	—	135	—	—	—	130	81	—	—	—	—	—	346
Mackerel, jack	6,224,811	5,612,113	3,747,376	2,043,668	1,895,639	2,501,628	4,820,329	4,067,845	2,295,727	1,638,864	3,039,151	2,898,466	40,785,617
Mackerel, Pacific	3,015	—	1,613	1,832	8,788	30,473	70,390	22,424	13,552	12,649	10,920	167,844	343,500
Perch	448	1,476	1,047	1,137	613	752	291	1,096	655	532	171	1,214	9,432
Queenfish	1,665	980	1,540	60	715	2,005	2,185	535	90	915	940	1,180	12,810
Rockfish	120,282	90,639	58,269	50,217	64,498	48,484	50,367	37,725	31,825	42,137	54,423	74,284	723,150
Sablefish	588	22	317	550	1,415	1,203	224	27	1,163	1,034	116	—	6,659
Salmon	—	—	—	—	553	15	23	—	11	—	—	—	602
Sanddab	—	—	25	—	—	—	—	—	—	—	54	59	138
Sardine, Pacific	—	—	—	—	—	13,750	2,440	—	—	—	—	—	16,190
Sculpin	144	308	106	237	148	162	—	930	529	265	222	220	3,271
Sea bass, giant	—	—	—	—	—	209	218	516	—	110	160	—	1,213
Seabass, white	—	157	50	132	1,730	1,512	9,590	16,017	4,605	4,55017,268	6,732	62,343	
Shark	4,410	4,789	9,474	5,912	11,321	27,913	25,784	22,290	10,174	11,406	16,189	16,558	166,220
Sheephead, California	8	289	149	39	430	550	369	327	189	290	463	1,850	4,953
Skate	—	—	18	—	—	—	—	—	—	—	—	—	18
Smelt, top or jack	—	—	—	335	125	—	—	—	—	—	3,795	5,725	9,980
Smelt, true	370	45	15	50	1,009	1,660	258	55	55	8,550	4,315	1,665	18,047
Sole, Dover	—	250	485	335	235	575	—	—	40	—	—	—	1,920
Sole, English	3,515	2,305	895	880	1,150	830	—	—	460	4,790	1,475	1,245	17,545
Sole, petrale	—	340	150	618	484	605	—	—	55	15	33	30	2,330
Sole, rex	1,690	505	1,320	825	760	885	—	—	275	1,145	430	805	8,640
Sole, miscellaneous	32	5	—	—	20	—	74	188	98	62	2	—	481

Swordfish	—	—	—	—	—	6,637	2,096	1,638	487	14,076	8,345	1,675	34,954
Tuna, albacore	—	—	—	—	—	—	31,572	209,981	377,044	508,395	211,612	18,992	1,357,596
Tuna, bluefin	—	—	—	—	—	6,800	92,295	480,386	803,159	710,125	—	44,028	2,136,793
Tuna, skipjack	—	—	—	—	—	—	—	—	197,094	443,708	2,842	185	643,829
Tuna, yellowfin	—	11,530	62,954	3,132	5,310	6,147	1,864	—	90,755	105,930	3,625	—	291,247
Yellowtail	—	—	—	—	237	578	527	698	431	89	3,680	1,079	7,319
Miscellaneous	45	—	—	—	—	349	—	6	—	—	215	45	660
Crustacean:													
Crab, rock	41,133	37,277	38,631	34,992	40,356	39,018	62,340	60,445	56,601	51,360	50,644	58,007	570,804
Lobster, California spiny	8,772	8,141	8,282	—	—	—	—	—	—	27,370	21,724	18,386	92,675
Echinoderm:													
Sea urchin	—	—	—	—	—	—	—	—	—	11,980	31,910	99,610	143,500
Mollusk:													
Abalone, black	5,976	—	4,498	836	2,351	14,084	24,424	—	8,933	5,518	12,888	6,178	85,686
Abalone, green	13,463	—	10,578	4,989	8,803	10,630	8,576	—	6,706	6,246	8,807	9,861	88,659
Abalone, pink	35,614	—	13,460	16,364	26,682	18,098	18,712	—	6,820	4,551	9,112	12,229	161,642
Abalone, red	351	—	15	1,664	93	1,153	1,004	—	716	158	960	3,007	9,121
Abalone, white	9,614	—	4,162	6,659	6,738	5,404	9,806	—	2,164	1,305	7,145	3,812	56,809
Octopus	—	—	—	—	—	—	—	—	—	—	17	13	30
Snail, sea	546	770	900	670	1,345	1,055	1,270	1,600	1,090	1,030	1,355	960	12,591
Squid, market	4,569,634	2,209,704	38,325	172,100	44,750	589,892	848,792	7,828	46,710	10	595,000	2,720,595	11,843,340
Miscellaneous mollusk	75	—	—	—	—	—	—	—	275	—	—	—	350
Total Pounds	43,326,459	10,976,608	26,913,406	35,908,071	5,555,835	3,708,130	7,724,082	6,253,961	14,441,392	18,271,918	49,539,324	42,089,840	264,709,026
Waters north of State:													
Fish:													
Tuna, albacore	—	—	—	—	—	—	—	13,960	37,515	—	—	—	51,475
Total Pounds	—	—	—	—	—	—	—	13,960	37,515	—	—	—	51,475
Waters south of state:													
Fish:													
Barracuda, California	—	—	—	—	—	—	—	18	—	—	—	—	18
Bonito, Pacific	250	14,090	11,455	32,965	—	3,265	598,101	1,638,060	1,378,565	—	8,150	—	3,684,901
Dolphinfish	—	—	—	—	—	—	—	—	310	—	—	—	310
Grouper	5,840	—	3,760	—	—	—	—	—	—	—	—	—	9,600
Halfmoon	—	—	—	—	—	—	—	—	13,170	—	—	—	13,170
Halibut, California	—	—	—	—	7	—	30	—	—	—	10	—	47
Perch	—	—	—	50	—	—	—	—	—	—	—	—	50
Rockfish	—	—	3,240	—	—	—	—	130	—	—	159	—	3,529
Sea Bass, giant	9,744	2,680	3,100	396	1,770	—	638	—	—	—	1,767	4,550	24,645
Seabass, white	45,783	41,871	24,244	1,781	36,459	69,795	157,954	40	—	—	20,504	17,005	415,436
Shark	7,305	5,043	6,556	1,390	4,220	230	124	54	—	—	1,557	13,965	40,444
Sheephead, California	—	100	40	186	—	—	—	—	—	—	—	—	326
Swordfish	—	—	—	—	—	234	1,032	—	—	—	—	—	1,266
Tuna, albacore	24,239	12,750	320	—	—	965	166,796	479,170	991,201	238,355	41,174	124,103	2,079,073
Tuna, bigeye	—	585,210	822,365	—	—	—	—	—	63,600	—	41,540	37,280	1,549,995

TABLE 13—Continued

Monthly Landings of Commercial Fish into the Los Angeles Area during 1976

Species	*January*	*February*	*March*	*April*	*May*	*June*	*July*	*August*	*September*	*October*	*November*	*December*	*Total Pounds*
Tuna, bluefin	—	194,039	427,273	312,150	7,304	2,185,808	818,356	2,431,548	3,985,458	734,566	341,717	32,008	11,470,227
Tuna, skipjack	5,112,979	2,860,336	21,186,476	8,127,479	14,985,466	9,781,186	6,142,791	1,304,809	2,862,196	2,050,928	4,662,549	3,058,234	82,135,429
Tuna, skipjack, black	—	4,515	179,460	—	49,495	1,935	251,955	—	—	—	47,280	300,020	834,660
Tuna, yellowfin	2,922,576	5,959,747	51,125,304	12,031,915	22,345,786	24,065,152	24,260,095	20,641,552	18,844,990	14,791,885	18,222,141	7,830,053	223,041,196
Wahoo	—	—	2,815	—	3,380	—	—	—	—	—	—	—	6,195
Yellowtail	50,412	24,017	5,963	640	1,986	3,325	90,052	1,062	34,685	—	18,362	18,782	249,286
Miscellaneous	120	—	—	—	—	—	—	—	—	—	—	—	120
Crustacean:													
Crab, pelagic red	—	32,000	—	—	—	—	—	—	—	—	—	—	32,000
Total Pounds	8,179,248	9,736,398	73,802,371	20,508,952	37,435,873	36,111,895	32,487,924	26,496,443	28,174,175	17,815,734	23,406,910	11,436,000	325,591,923
South Pacific Islands:													
Fish:													
Tuna, skipjack	—	—	—	—	—	—	—	—	—	—	237,575	—	237,575
Tuna, yellowfin	—	—	—	—	—	—	—	—	—	—	149,830	—	149,830
Total Pounds	—	—	—	—	—	—	—	—	—	—	387,405	—	387,405
Africa:													
Fish:													
Tuna, bigeye	—	231,636	—	—	—	—	—	—	—	—	—	—	231,636
Tuna, skipjack	—	801,030	196,282	—	—	—	—	—	—	—	—	—	997,312
Tuna, yellowfin	—	1,153,990	346,314	—	—	—	—	—	—	—	—	—	1,500,304
Total Pounds	—	2,186,656	542,596	—	—	—	—	—	—	—	—	—	2,729,252
Shipments:*													
Fish:													
Tuna, albacore	928,286	422,951	2,587,518	2,446,617	1,062,485	2,918,490	6,683,474	6,508,710	2,443,656	1,893,525	3,582,915	8,433,765	39,912,392
Tuna, bigeye	—	—	—	—	—	—	—	—	—	—	87,433	62,525	149,958
Tuna, bluefin	—	—	—	—	—	—	—	—	562,520	—	—	—	562,520
Tuna, skipjack	3,127,072	4,735,118	2,344,882	1,273,887	8,440,105	3,659,522	2,188,681	4,926,197	4,706,311	8,248,054	5,847,672	9,973,801	59,471,302
Tuna, skipjack, black	—	—	—	43,046	—	—	—	—	—	—	—	—	43,046
Tuna, yellowfin	1,303,046	1,060,132	1,654,843	2,746,144	656,166	1,052,154	2,451,599	1,091,706	1,356,712	784,234	18,182	69,356	130,584
											678,290	814,296	15,649,322
Total Pounds	5,358,404	6,218,201	6,587,243	6,509,694	10,158,756	7,630,166	11,323,754	12,526,613	9,069,199	10,925,813	10,214,492	19,353,743	115,876,078
Grand Total	**56,864,111**	**29,117,863**	**107,845,616**	**62,926,717**	**53,150,464**	**47,450,191**	**51,535,760**	**45,290,977**	**51,722,281**	**47,013,465**	**83,548,131**	**72,879,583**	**709,345,159**

* For origin of shipments refer to Table 6. Beginning in 1965 only tuna shipments are recorded.

TABLE 14

Monthly Landings and Shipments of Commercial Fish Into the San Diego Area during 1976

Species	January	February	March	April	May	June	July	August	September	October	November	December	Total Pounds
LANDINGS FROM:													
California waters:													
Fish:													
Anchovy, northern	—	78	—	—	—	50	—	—	80	—	—	—	208
Barracuda, California	70	14	—	821	1,449	6,496	3,253	946	83	285	28	14	13,459
Bonito, Pacific	99	68	—	350	6,363	3,654	15,483	631	2,333	2,324	2,455	2,562	36,322
Butterfish, Pacific	—	—	—	—	—	—	—	125	423	60	—	134	742
Croaker, white	872	85	164	280	45	—	380	715	76	5	33	391	3,046
Dolphinfish	—	298	832	—	—	—	159	698	2,302	476	1,439	60	6,264
Flounder	—	—	—	—	—	—	—	—	—	—	2	—	2
Halfmoon	21	—	—	42	35	1,279	1,215	984	674	498	561	629	5,938
Halibut, California	5,725	6,151	11,215	2,592	3,662	1,833	2,346	2,247	521	1,822	939	5,068	44,121
Lingcod	—	—	22	236	150	17	—	141	17	10	13	156	762
Mackerel, jack	2,548	2,906	4,056	2,921	19	155	75	16	—	535	500	875	14,606
Mackerel, Pacific	63	—	624	—	—	1,120	708	413	—	—	9	450	3,387
Mullet	—	—	—	—	513	1,028	1,154	—	612	—	—	—	3,307
Perch	62	245	78	—	207	714	1,317	1,688	603	132	1,886	1,613	8,545
Queenfish	—	—	—	—	—	—	—	70	—	—	—	—	70
Rockfish	130,937	77,978	119,468	109,844	81,638	57,494	37,413	38,695	70,593	104,620	77,534	107,746	1,013,960
Sablefish	2,099	2,781	3,444	2,568	2,346	3,025	2,314	4,700	1,977	566	204	—	26,024
Salmon	—	—	—	—	—	286	—	—	—	—	—	—	286
Sanddab	—	—	—	12	63	—	—	—	—	—	—	56	131
Sculpin	592	472	1,514	1,554	1,224	12,276	6,151	103	1,373	1,384	4,068	117	30,828
Sea bass, giant	—	358	39	24	139	50	631	288	1,034	538	310	289	3,700
Seabass, white	4,895	23,423	2,303	775	3,835	2,945	8,742	16,221	1,701	12,716	16,182	12,286	106,024
Shark	4,193	2,898	3,849	9,810	6,478	13,519	34,020	7,099	2,619	3,929	7,707	6,942	103,063
Sheephead, California	—	240	136	40	44	188	674	18	9	205	—	—	1,554
Smelt, top or jack	163	—	—	—	—	—	—	—	—	—	39	—	202
Smelt, true	—	—	—	—	—	—	—	—	—	—	—	8	8
Sole, English	—	—	—	—	—	—	13	—	—	—	—	—	13
Sole, petrale	121	34	16	—	—	—	—	—	60	—	—	—	231
Sole, miscellaneous	199	83	202	121	151	10	176	35	48	35	22	54	1,136
Swordfish	—	—	—	—	—	8,594	463	331	—	2,180	3,946	1,039	16,553
Tuna, albacore	579	—	2,376	—	223	11,309	57,819	98,780	261,208	426,589	226,338	100,372	1,185,593
Tuna, bluefin	309	—	—	—	—	23	163	110	121,205	242	—	179	122,231
Tuna, skipjack	—	—	—	—	—	—	—	9,076	26,271	6,726	2,114	1,584	45,771
Tuna, yellowfin	—	—	—	—	—	—	—	11	190,252	1,009	6,683	278	198,233
Turbot	—	—	—	—	—	—	1	—	—	—	—	—	1
Yellowtail	4,160	8,995	17	—	11,257	3,571	5,851	6,324	2,661	10,368	14,652	982	68,838
Miscellaneous	—	117	—	—	—	297	—	52	—	132	257	456	1,311

TABLE 14—Continued

Monthly Landings and Shipments of Commercial Fish Into the San Diego Area during 1976

Species	*January*	*February*	*March*	*April*	*May*	*June*	*July*	*August*	*September*	*October*	*November*	*December*	*Total Pounds*
Crustacean:													
Crab, rock	6,606	7,090	6,794	8,234	6,763	6,452	7,866	8,440	4,341	5,107	4,052	6,241	77,986
Lobster, California spiny	8,212	6,242	5,151	—	—	—	—	—	—	53,707	30,450	14,723	118,485
Echinoderm:													
Sea urchin	46,300	18,020	7,520	575	—	2,063	4,234	17,331	61,420	91,881	75,981	70,245	395,570
Mollusk:													
Abalone, black	50	—	—	162	2	258	213	—	804	112	983	1,102	3,686
Abalone, green	4,267	—	2,259	833	1,136	2,455	4,133	—	3,688	5,513	2,386	3,929	30,599
Abalone, pink	24,264	—	6,846	2,811	6,997	7,302	5,799	6	8,969	11,657	6,184	6,954	87,789
Abalone, red	6,767	—	2,957	447	7,763	9,337	6,793	—	4,527	7,876	7,031	8,409	61,907
Abalone, threaded	41	—	62	5	87	40	8	—	3	15	18	6	285
Abalone, white	6,017	—	4	112	2,601	667	1,032	—	6,285	1,742	1,494	2,198	22,152
Octopus	—	—	—	—	—	36	—	—	—	—	35	—	71
Snail, sea	—	—	—	—	—	4	12	73	131	—	118	125	463
Squid, market	18,262	22,949	—	—	—	335	5,249	1,305	3,411	401	—	—	51,912
Miscellaneous mollusk	34	—	5	—	9	7	—	—	—	—	—	—	55
Total Pounds	278,527	181,525	181,953	145,169	145,199	158,889	215,860	217,672	782,314	755,397	496,653	358,272	3,917,430
Waters south of State:													
Fish:													
Barracuda, California	44	—	—	71	—	29	121	70	—	—	—	—	335
Bonito, Pacific	—	539	1,214	—	94	96	175,910	1,018,095	83,210	9,900	22,417	18,171	1,329,646
Dolphinfish	—	—	—	—	407	—	78	650	1,293	572	—	175	3,175
Halibut, California	206	102	93	—	114	84	50	9	—	91	—	—	749
Perch	—	—	—	—	—	—	—	—	493	—	—	—	493
Rockfish	2,192	343	1,519	—	427	—	—	12	812	10,585	14,063	670	30,623
Sculpin	—	—	—	—	—	53,442	50,772	29,310	2,224	1,798	1,221	756	139,523
Sea bass, giant	2,611	2,217	1,906	4,361	13,343	302	—	57	64	—	210	528	25,599
Seabass, white	28,618	24,409	20,714	34,866	42,285	91,918	139,099	20,797	4,320	11,398	20,411	6,262	445,097
Shark	12,927	1,432	6,210	3,776	3,132	2,024	—	—	1,415	3,160	9,697	4,723	48,496
Swordfish	—	5,049	—	—	—	—	—	—	—	—	—	10,491	15,540
Tuna, albacore	105,832	193,747	57,007	—	—	35,891	954,372	1,478,994	3,104,511	1,017,630	448,814	269,314	7,666,112
Tuna, bigeye	—	—	—	—	—	—	204	—	78,131	—	—	—	78,335
Tuna, bluefin	—	368,183	58,732	—	—	197,215	755,765	1,505,513	1,587,934	188,759	397,880	213	5,060,194
Tuna, skipjack	86,094	1,363,933	7,537,486	2,270,986	5,280,066	6,826,878	2,863,853	1,595,407	1,329,888	2,540,099	4,056,944	2,881,103	38,632,737
Tuna, skipjack, black	—	—	—	—	—	—	—	—	—	—	74,933	20,867	95,800
Tuna, yellowfin	48,331	463,998	6,609,276	866,756	2,315,057	7,500,778	10,036,090	3,109,955	5,798,568	6,089,059	3,718,687	4,327,245	50,883,800
Wahoo	1,410	—	1,143	—	1,720	—	—	333	79	46	49	1,600	6,380
Yellowtail	23,411	11,229	4,581	460	531	9,065	20,098	16,062	13,237	7,919	23,214	19,615	149,422
Total Pounds	311,676	2,435,181	14,299,881	3,181,276	7,657,176	14,717,722	14,996,412	8,775,264	12,006,179	9,881,016	8,788,540	7,561,733	104,612,056

SHIPMENTS

Fish:														
Tuna, albacore	26,232	—	—	119,666	—	190,281	—	1,355,887	266,805	—	159,407	2,055,201	4,173,479
Tuna, bigeye	—	—	—	—	—	—	—	—	—	—	—	280	280
Tuna, bluefin	—	—	—	—	—	—	—	—	1,108,129	—	—	110,096	1,218,225
Tuna, skipjack	781,709	214,261	727,814	1,264,568	43,724	259,190	266,789	256,664	1,952,526	1,266,086	435,354	8,973,979	16,442,664
Tuna, skipjack, black	—	—	—	282,072	—	—	—	—	—	—	—	—	282,072
Tuna, yellowfin	634,339	232,576	116,636	280,078	63,735	106,396	658,009	941,157	937,472	1,656,464	1,365,283	1,809,834	8,801,979
Total Pounds	1,442,280	446,837	844,450	1,946,384	107,459	555,867	924,798	2,553,708	4,264,932	2,922,550	1,960,044	12,949,390	30,918,699
Grand Total	2,032,483	3,063,543	15,326,284	5,272,829	7,909,834	15,432,478	16,137,070	11,546,644	17,053,425	13,558,963	11,245,237	20,869,395	139,448,185

* For origin of shipments refer to Table 6 Beginning in 1965 only tuna shipments were recorded

TABLE 15

Value of Landings and Shipments of Commercial Fish Into California by Area, 1976

Species	Eureka	San Francisco	Monterey	Santa Barbara	Los Angeles	San Diego	Total
LANDINGS:							
Fish:							
Anchovy, northern	—	634,000	9,950,022	38,628,084	200,626,393	208	249,838,707
	—	$53,934	$199,283	$748,167	$3,626,062	$65	$4,627,511
Barracuda, California	—	—	—	10,567	137,730	13,794	162,091
	—	—	—	$2,977	$58,240	$5,802	$67,019
Bonito, Pacific	—	117	285	144,987	7,385,502	1,365,968	8,896,859
	—	$23	$52	$16,647	$1,013,258	$192,510	$1,222,490
Butterfish, Pacific	—	—	3,655	2,546	61,424	742	68,367
	—	—	$4,701	$1,076	$33,329	$317	$39,423
Cabezon	16	986	1,880	16,275	9	—	19,166
	$5	$124	$313	$1,858	$3	—	$2,303
Croaker, white	502	46,892	87,456	127,887	232,178	3,046	497,961
	$51	$12,555	$15,290	$29,699	$37,704	$846	$96,145
Dolphinfish	—	—	—	38	439	9,439	9,916
	—	—	—	$19	$94	$2,716	$2,829
Eel	130	10	48	864	—	—	1,052
	$20	$1	$6	$91	—	—	$118
Flounder	652,164	369,680	124,578	35,215	98	2	1,181,737
	$79,845	$45,273	$25,223	$5,412	$30	$1	$155,784
Flounder, arrowtooth	181,708	3,520	—	—	—	—	185,228
	$12,686	$246	—	—	—	—	$12,932
Flyingfish	—	—	—	—	98,176	—	98,176
	—	—	—	—	$30,921	—	$30,921
Grenadiers	91,713	340	—	—	—	—	92,053
	$5,037	$17	—	—	—	—	$5,054
Grouper	—	—	—	—	9,600	—	9,600
	—	—	—	—	$4,800	—	$4,800
Hake, Pacific	770	210	8,230	9,291	10,020	—	28,521
	$46	$10	$421	$320	$501	—	$1,298
Halfmoon	—	—	—	—	20,238	5,938	26,176
	—	—	—	—	$5,393	$2,043	$7,436
Halibut, California	160	38,132	36,812	406,171	102,255	44,870	628,400
	$169	$28,975	$31,271	$366,504	$77,196	$32,280	$536,395
Herring, Pacific	25,234	4,360,281	434,161	15	—	—	4,819,691
	$2,576	$434,708	$45,484	$15	—	—	$482,783
Lingcod	1,560,538	917,585	162,930	478,129	346	762	3,120,290
	$227,762	$131,648	$25,652	$73,279	$73	$192	$458,606
Mackerel, jack	9,873	1,050	108,378	3,973,557	40,785,617	14,606	44,893,081
	$594	$56	$7,230	$310,246	$1,757,328	$4,885	$2,080,339
Mackerel, Pacific	—	—	4,600	2,242	343,500	3,387	353,729
	—	—	$230	$525	$17,636	$968	$19,359
Mullet	—	—	—	—	—	3,307	3,307
	—	—	—	—	—	$1,488	$1,488
Opah	—	—	2,434	24	—	—	2,458
	—	—	$246	$2	—	—	$248
Perch	53,029	43,120	887	26,481	9,482	9,038	142,037
	$15,377	$23,906	$323	$11,560	$2,747	$3,223	$57,136
Queenfish	—	—	—	34	12,810	70	12,914
	—	—	—	$26	$1,301	$24	$1,351
Rockfish	9,719,321	2,436,244	4,832,422	5,843,930	726,679	1,044,583	24,603,179
	$1,354,998	$408,515	$758,380	$938,124	$208,604	$307,972	$3,976,593
Sablefish	5,227,890	741,969	7,115,251	213,468	6,659	26,024	13,331,261
	$513,519	$74,963	$651,268	$14,911	$489	$3,764	$1,258,914
Salmon	4,840,103	1,725,479	1,009,241	210,577	602	286	7,786,288
	$6,383,055	$2,455,730	$1,500,969	$366,280	$766	$443	$10,707,243
Sanddab	520,017	619,487	148,356	5,743	138	131	1,293,872
	$109,125	$131,178	$24,343	$1,432	$34	$57	$266,169
Sardine, Pacific	—	—	—	—	16,190	—	16,190
	—	—	—	—	$688	—	$688
Sculpin	—	—	—	53	3,271	170,351	173,675
	—	—	—	$31	$1,817	$72,132	$73,980
Sea Bass, giant	—	—	—	971	25,858	29,299	56,128
	—	—	—	$445	$11,189	$13,652	$25,286
Seabass, white	—	991	4,158	24,624	477,779	551,121	1,058,673
	—	$1,023	$4,069	$21,117	$300,991	$343,507	$670,707
Shark	39,631	128,397	94,422	241,531	206,664	151,559	862,204
	$7,040	$16,939	$11,199	$64,612	$58,074	$47,181	$205,045
Sheephead, California	—	—	—	1,492	5,279	1,554	8,325
	—	—	—	$331	$1,116	$367	$1,814
Skate	46,460	7,981	100,494	6,184	18	—	161,137
	$4,447	$481	$7,348	$621	$3	—	$12,900
Smelt, top or jack	—	152	849	73	9,980	202	11,256
	—	$22	$223	$7	$1,048	$71	$1,371
Smelt, true	308,739	25,618	23,750	1	18,047	8	376,163
	$32,022	$3,825	$4,921	—	$2,175	$2	$42,945
Smelt, whitebait	229,371	21,447	435	—	—	—	251,253
	$39,464	$3,582	$108	—	—	—	$43,154

TABLE 15—Continued

Value of Landings and Shipments of Commercial Fish Into California by Area, 1976

Species	Eureka	San Francisco	Monterey	Santa Barbara	Los Angeles	San Diego	Total
Sole, Dover	18,223,733	2,736,867	1,613,215	181,077	1,920	—	22,756,812
	$2,444,627	$380,528	$221,417	$21,222	$288	—	$3,068,082
Sole, English	2,066,198	1,306,077	436,467	456,698	17,545	13	4,282,998
	$423,023	$280,027	$76,928	$91,088	$2,664	$5	$873,735
Sole, petrale	1,286,130	994,950	222,847	471,069	2,330	231	2,977,557
	$356,280	$272,958	$57,803	$126,598	$583	$138	$814,360
Sole, rex	1,410,361	369,653	146,042	78,124	8,640	—	2,012,820
	$290,961	$78,988	$23,143	$15,913	$1,714	—	$410,719
Sole, sand	91,781	136,851	9,213	11,652	—	—	249,497
	$22,786	$33,109	$2,017	$2,753	—	—	$60,665
Sole, miscellaneous	18,333	12,854	1,460	11,194	481	1,136	45,458
	$2,700	$2,714	$347	$2,347	$155	$577	$8,840
Swordfish	—	439	3,684	11,137	36,220	32,093	83,623
	—	$1,223	$10,752	$32,284	$103,926	$81,937	$230,122
Tuna, albacore	4,917,997	3,271,797	5,496,731	1,733,002	3,488,144	8,851,705	27,759,376
	$2,243,844	$1,501,185	$2,472,527	$802,450	$1,633,414	$4,069,860	$12,723,280
Tuna, bigeye	—	—	—	—	1,781,631	78,335	1,859,966
	—	—	—	—	$518,495	$23,948	$542,443
Tuna, bluefin	—	—	—	—	13,607,020	5,182,425	18,789,445
	—	—	—	—	$4,106,742	$1,509,125	$5,615,867
Tuna, skipjack	—	—	1,153	246	84,014,145	38,678,508	122,694,052
	—	—	$323	$72	$22,458,853	$10,530,634	$32,989,882
Tuna, skipjack, black	—	—	—	—	834,660	95,800	930,460
	—	—	—	—	$83,287	$7,185	$90,472
Tuna, yellowfin	—	—	—	—	224,982,577	51,082,033	276,064,610
	—	—	—	—	$66,378,627	$15,231,177	$81,609,804
Turbot	8,718	8,300	345	12,226	—	1	29,590
	$1,963	$1,437	$50	$1,718	—	—	$5,168
Wahoo	—	—	—	—	6,195	6,380	12,575
	—	—	—	—	$1,440	$2,271	$3,711
Yellowtail	—	—	—	1,066	256,605	218,260	475,931
	—	—	—	$291	$52,538	$52,947	$105,776
Miscellaneous	734	669	487	253	780	1,311	4,234
	$67	$1,845	$50	$56	$186	$356	$2,560
Crustacean:							
Crab, Dungeness	15,023,809	685,655	1,125	16,185	—	—	15,726,774
	$9,699,528	$559,208	$956	$15,293	—	—	$10,275,285
Crab, pelagic red	—	—	—	—	32,000	—	32,000
	—	—	—	—	$720	—	$720
Crab, rock	—	84	—	578,892	570,804	77,986	1,227,766
	—	$11	—	$157,410	$159,945	$24,597	$341,963
Lobster, California spiny	—	—	—	$1,374	92,675	118,485	292,534
	—	—	—	$177,529	$220,949	$264,700	$663,178
Prawn, ridgeback	—	—	—	3,130	—	—	3,130
	—	—	—	$1,983	—	—	$1,983
Prawn, spot	—	20	23,476	88,573	—	—	112,069
	—	$16	$55,820	$126,331	—	—	$182,167
Shrimp, Pacific ocean	3,498,384	495	—	1,909	—	—	3,500,788
	$681,797	$79	—	$1,007	—	—	$682,883
Miscellaneous crustacean	—	925	—	655	—	—	1,580
	—	$740	—	$169	—	—	$909
Echinoderm:							
Sea urchin	74,851	19,942	—	10,472,563	143,500	395,570	11,106,426
	$7,353	$3,968	—	$978,387	$13,949	$34,979	$1,038,636
Mollusk:							
Abalone, black	—	—	—	267,379	85,686	3,686	356,751
	—	—	—	$97,235	$32,648	$1,519	$131,402
Abalone, green	—	—	—	1,231	88,659	30,599	120,489
	—	—	—	$1,384	$83,331	$29,915	$114,630
Abalone, pink	—	—	—	181,712	161,642	87,789	431,143
	—	—	—	$176,955	$154,686	$79,502	$411,143
Abalone, red	—	62,953	1,365	604,275	9,121	61,907	739,621
	—	$70,590	$1,393	$566,548	$8,070	$56,908	$703,509

TABLE 15—Continued

Value of Landings and Shipments of Commercial Fish Into California by Area, 1976

Species	*Eureka*	*San Francisco*	*Monterey*	*Santa Barbara*	*Los Angeles*	*San Diego*	*Total*
Abalone, threaded	—	12	—	2,610	—	285	2,907
	—	$8	—	$1,344	—	$144	$1,496
Abalone, white	—	—	—	2,946	56,809	22,152	81,907
	—	—	—	$4,582	$64,957	$21,813	$91,352
Mussel	—	2,357	—	—	—	—	2,357
	—	$377	—	—	—	—	$377
Octopus	73,037	3,981	3,722	777	30	71	81,618
	$19,249	$1,033	$1,713	$181	$25	$38	$22,239
Oyster, eastern	—	5,996	—	—	—	—	5,996
	—	$24,704	—	—	—	—	$24,704
Oyster, giant Pacific	466,667	241,349	—	2,344	—	—	710,360
	$653,334	$337,889	—	$3,282	—	—	$994,505
Snail, sea	589	81	—	—	12,591	463	13,724
	$35	$38	—	—	$2,523	$143	$2,739
Squid, market	—	—	5,021,817	3,388,936	11,843,340	51,912	20,306,005
	—	—	$345,690	$74,139	$322,999	$3,738	$746,566
Miscellaneous mollusk	162	321	—	257	350	55	1,145
	$31	$97	—	$308	$347	$22	$805
Total pounds	70,668,853	21,986,366	37,238,883	69,074,546	593,469,081	108,529,486	900,967,215
Total value	$25,635,716	$7,380,506	$6,589,482	$6,457,193	$103,661,671	$33,064,686	$182,789,254
SHIPMENTS:*							
Fish:							
Tuna, albacore	—	—	—	—	39,912,392	4,173,479	44,085,871
	—	—	—	—	$28,462,231	$2,798,902	$31,261,133
Tuna, bigeye	—	—	—	—	149,958	280	150,238
	—	—	—	—	$52,505	$104	$52,609
Tuna, bluefin	—	—	—	—	562,520	1,218,225	1,780,745
	—	—	—	—	$166,138	$361,776	$527,914
Tuna, skipjack	—	—	—	—	59,471,302	16,442,664	75,913,966
	—	—	—	—	$20,023,531	$5,694,027	$25,717,558
Tuna, skipjack, black	—	—	—	—	130,584	282,072	412,656
	—	—	—	—	$16,513	$22,566	$39,079
Tuna, yellowfin	—	—	—	—	15,649,322	8,801,979	24,451,301
	—	—	—	—	$6,280,686	$2,781,520	$9,062,206
Total pounds	—	—	—	—	115,876,078	30,918,699	146,794,777
Total value	—	—	—	—	$55,001,604	$11,658,895	$66,660,499
Grand total pounds	70,668,853	21,986,366	37,238,883	69,074,546	709,345,159	139,448,185	1,047,761,992
Grand total value	$25,635,716	$7,380,506	$6,589,482	$6,457,193	$158,663,275	$44,723,581	$249,449,753

* For origin of shipments refer to Table 6. Beginning in 1965 only tuna shipments are recorded.

TABLE 16
Value of Landings by Port, Eureka Area, 1976

	Pounds	Value
Eureka		
Dungeness crab	6,653,037	$4,295,403
Salmon	1,902,114	2,504,011
Dover sole	11,167,360	1,498,048
Albacore	2,312,144	1,054,919
Giant Pacific oyster	466,667	653,334
Rockfish	4,104,355	560,022
Pacific ocean shrimp	1,659,781	323,473
Sablefish	2,443,309	239,998
Petrale sole	641,073	177,588
English sole	760,188	155,637
Rex sole	684,059	141,123
Lingcod	448,560	65,468
Sandab	222,347	46,659
Flounder	330,306	40,440
True smelt	299,624	30,972
Whitebait smelt	149,532	25,728
Perch	28,804	8,968
Arrowtooth flounder	76,060	5,310
Sand sole	21,229	5,270
Grenadiers	89,000	4,888
Octopus	10,690	2,818
Pacific herring	23,134	2,362
Turbot	7,868	1,772
All other species	6,199	933
Port totals	34,507,440	$11,845,144
Crescent City		
Dungeness crab	6,544,602	$4,225,394
Salmon	785,162	935,981
Dover sole	3,238,006	434,363
Albacore	570,127	260,121
Pacific ocean shrimp	1,303,565	254,051
English sole	977,277	200,083
Rockfish	1,004,087	142,005
Petrale sole	221,987	61,494
Lingcod	410,372	59,894
Rex sole	280,577	57,884
Sablefish	562,942	55,296
Sanddab	254,433	53,393
Flounder	316,409	38,738
Sand sole	70,359	17,468
Arrowtooth flounder	95,267	6,651
Whitebait smelt	38,007	6,539
Perch	24,225	6,409
Octopus	18,721	4,934
Skate	41,581	3,861
Shark	6,305	1,100
All other species	20,356	2,869
Port totals	16,784,367	$6,828,528
Fort Bragg		
Salmon	1,595,281	$2,217,157
Albacore	2,021,281	922,213
Dungeness crab	1,081,933	698,529
Rockfish	4,546,405	643,019
Dover sole	3,818,367	512,216
Sablefish	2,221,629	218,224
Petrale sole	423,070	117,198
Pacific ocean shrimp	535,038	104,273
Lingcod	685,736	100,084
Rex sole	445,725	91,954
English sole	328,733	67,303
Octopus	43,626	11,497
Sanddab	43,237	9,073
Sea urchin	74,851	7,353
Whitebait smelt	41,832	7,197
Shark	30,787	5,487
All other species	42,343	3,906
Port totals	17,979,874	$5,736,683

TABLE 16—Continued
Value of Landings by Port, Eureka Area, 1976

	Pounds	*Value*
Trinidad		
Dungeness crab	744,237	$480,502
Salmon	212,480	248,208
Rockfish	12,610	1,872
Lingcod	12,537	1,830
All other species	583	90
Port totals	982,447	$732,502
Albion		
Salmon	218,702	$304,908
Rockfish	44,053	6,945
Albacore	13,109	5,981
All other species	3,220	471
Port totals	279,084	$318,305
All other ports		
Salmon	126,364	$172,790
Rockfish	7,811	1,135
All other species	1,466	629
Totals	135,641	$174,554
Eureka area totals	70,668,853	$25,635,716

TABLE 17
Value of Landings by Port, San Francisco Area, 1976

	Pounds	*Value*
Bodega Bay		
Salmon	859,474	$1,221,756
Albacore	522,905	239,922
Dungeness crab	233,458	190,404
Dover sole	1,184,637	164,709
Rockfish	680,962	107,870
Pacific herring	665,689	66,367
English sole	286,990	61,532
Sablefish	283,604	28,653
Rex sole	111,522	23,830
Lingcod	165,590	23,758
Petrale sole	76,212	20,908
Whitebait smelt	21,261	3,551
True smelt	21,160	3,138
Sanddab	14,292	3,026
Flounder	24,420	2,991
Shark	9,610	1,299
White croaker	4,340	1,162
All other species	10,813	2,065
Port totals	5,176,939	$2,166,941
San Francisco		
Rockfish	1,645,525	$280,909
Petrale sole	904,635	248,181
Pacific herring	2,477,209	246,971
Dover sole	1,530,706	212,826
English sole	970,761	208,134
Dungeness crab	205,369	167,495
Salmon	113,019	158,539
Sanddab	582,665	123,381
Lingcod	722,946	103,724
Albacore	202,454	92,891
Rex sole	252,671	53,991
Sablefish	452,885	45,756
Flounder	325,538	39,867
Sand sole	127,091	30,748
California halibut	12,981	9,864
Shark	45,301	5,951
Northern anchovy	69,830	5,940
White croaker	21,943	5,875
Perch	5,088	2,894
Turbot	6,616	1,145
All other species	16,557	3,616
Port totals	10,691,790	$2,048,698
Sausalito		
Albacore	1,289,966	$591,870
Salmon	327,076	459,405
Pacific herring	1,000,994	99,796
Northern anchovy	506,420	43,081
Dungeness crab	14,855	12,115
Rockfish	43,263	7,134
All other species	7,045	1,266
Port totals	3,189,619	$1,214,667

TABLE 17—Continued
Value of Landings by Port, San Francisco Area, 1976

	Pounds	Value
Princeton		
Salmon	185,662	$269,293
Albacore	274,077	125,754
Dungeness crab	150,438	122,695
Red abalone	62,953	70,590
California halibut	22,021	16,733
Rockfish	54,367	10,593
English sole	48,326	10,361
Shark	43,983	5,627
Northern anchovy	57,750	4,913
Sanddab	22,530	4,771
Sea urchin	19,942	3,968
Petrale sole	14,103	3,869
Lingcod	23,301	3,343
Dover sole	21,524	2,993
Flounder	18,805	2,303
Sand sole	6,035	1,460
Rex sole	5,460	1,167
White seabass	991	1,023
All other species	20,188	2,706
Port totals	1,052,456	$664,162
Oakland		
Albacore	982,309	$450,709
Salmon	110,190	155,640
Dungeness crab	6,146	5,013
Swordfish	489	1,223
All other species	1,653	525
Port totals	1,100,787	$613,110
Point Reyes		
Giant Pacific oyster	210,544	$294,762
Salmon	93,533	135,914
Dungeness crab	24,289	19,810
All other species	935	143
Port totals	329,301	$450,629
Tomales Bay		
Giant Pacific oyster	30,805	$43,127
Eastern oyster	5,996	24,704
Pacific herring	212,339	21,170
Shark	26,737	3,653
Perch	4,596	2,482
California halibut	1,888	1,434
All other species	7,494	1,932
Port totals	289,855	$98,502
Berkeley		
Salmon	30,814	$46,665
Dungeness crab	49,950	40,738
Perch	3,318	1,842
Rockfish	6,314	1,032
All other species	6,532	1,451
Port totals	96,928	$91,728
Richmond		
Perch	22,125	$12,284
Salmon	3,569	5,342
White croaker	16,975	4,545
All other species	862	152
Port totals	43,531	$22,323
All other ports		
Perch	6,930	$3,814
Salmon	1,905	2,816
All other species	6,325	3,116
Totals	15,160	$9,746
San Francisco area totals	21,986,366	$7,380,506

TABLE 18
Value of Landings by Port, Monterey Area, 1976

	Pounds	*Value*
Moss Landing		
Albacore	4,309,667	$1,938,565
Salmon	550,244	815,684
Dover sole	1,539,010	211,232
Northern anchovy	9,715,912	194,594
Rockfish	1,301,362	189,314
Sablefish	784,857	71,839
Market squid	375,400	25,842
Petrale sole	83,140	21,565
English sole	96,625	17,030
Sanddab	50,312	8,255
Lingcod	38,548	6,069
Rex sole	33,251	5,269
California halibut	5,862	4,980
Flounder	21,537	4,293
Shark	27,628	3,192
True smelt	13,258	2,747
Pacific herring	24,560	2,573
Sand sole	9,173	2,008
White croaker	7,992	1,397
Skate	16,052	1,174
All other species	7,878	2,612
Port totals	19,012,268	$3,530,234
Monterey		
Sablefish	6,330,133	$579,405
Rockfish	3,374,932	540,294
Albacore	1,157,694	520,751
Salmon	280,045	421,029
Market squid	4,646,357	319,844
English sole	339,842	59,898
Spot prawn	23,364	55,554
Pacific herring	409,560	42,907
Petrale sole	138,813	36,006
Rex sole	112,495	17,827
Lingcod	111,315	17,526
Sanddab	95,735	15,709
White croaker	67,326	11,771
Swordfish	3,684	10,752
California halibut	12,163	10,332
Dover sole	74,205	10,185
Flounder	46,297	9,620
Jack mackerel	106,708	7,119
Shark	54,823	6,585
Skate	73,937	5,406
Northern anchovy	234,010	4,687
True smelt	9,241	1,915
Octopus	3,651	1,680
Red abalone	1,365	1,393
White seabass	1,353	1,324
All other species	16,345	2,238
Port totals	17,725,393	$2,711,757
Santa Cruz		
Salmon	178,952	$264,256
Rockfish	156,128	28,772
California halibut	18,787	15,959
Albacore	29,370	13,211
Flounder	56,744	11,310
Pacific butterfish	2,786	3,583
White seabass	2,470	2,417
White croaker	12,138	2,122
Lingcod	13,067	2,057
Shark	11,971	1,422
All other species	18,809	2,382
Port totals	501,222	$347,491
Monterey area totals	37,238,883	$6,589,482

TABLE 19
Value of Landings by Port, Santa Barbara Area, 1976

	Pounds	Value
Santa Barbara		
Sea urchin	7,054,949	$659,100
Red abalone	532,346	499,110
Rockfish	1,400,492	223,255
California halibut	224,364	202,452
Pink abalone	167,927	163,531
California spiny lobster	74,064	161,582
Black abalone	267,106	97,136
Rock crab	339,998	92,451
Spot prawn	51,728	73,779
English sole	217,904	43,461
Shark	136,192	36,738
White seabass	15,161	13,002
Salmon	7,775	12,270
Petrale sole	44,061	11,841
Swordfish	3,893	11,285
Pacific bonito	57,820	6,638
Albacore	12,102	5,604
Sablefish	68,981	4,818
Rex sole	12,607	2,568
Ridgeback prawn	3,130	1,983
White croaker	8,138	1,890
Market squid	84,140	1,840
Green abalone	1,194	1,342
Threaded abalone	2,601	1,339
All other species	38,297	6,115
Port totals	10,826,970	$2,335,139
Morro Bay		
Albacore	1,555,466	$720,243
Rockfish	2,832,661	453,388
Salmon	105,927	187,455
Petrale sole	315,146	84,694
Lingcod	356,020	54,564
Red abalone	45,578	42,732
English sole	145,505	29,021
California halibut	27,340	24,670
Spot prawn	10,354	14,768
Dover sole	88,166	10,333
Rex sole	42,992	8,757
Dungeness crab	8,381	7,919
Perch	16,042	7,158
Sablefish	70,070	4,895
Shark	18,979	4,712
White croaker	19,237	4,467
Rock crab	15,482	4,210
Giant Pacific oyster	2,344	3,282
All other species	20,697	4,449
Port totals	5,696,387	$1,671,717
Port Hueneme		
Northern anchovy	38,627,228	$748,150
Jack mackerel	3,966,567	309,701
Sea urchin	972,558	90,860
California halibut	83,658	75,488
Market squid	3,303,513	72,271
Rockfish	61,377	12,331
Shark	38,105	10,033
Pacific bonito	85,310	9,795
California spiny lobster	1,087	2,371
White seabass	2,363	2,026
Rock crab	3,885	1,056
All other species	5,855	1,408
Port totals	47,151,506	$1,335,490

TABLE 19—Continued
Value of Landings by Port, Santa Barbara Area, 1976

	Pounds	*Value*
ila		
Rockfish	1,323,588	$204,681
Salmon	96,875	166,546
Albacore	156,197	72,326
Rock crab	210,261	57,173
California halibut	59,151	53,374
Spot prawn	26,491	37,784
Petrale sole	111,788	30,043
Red abalone	25,611	24,012
Lingcod	120,461	18,462
English sole	91,467	18,243
Dover sole	84,633	9,919
Shark	29,421	7,986
Dungeness crab	7,796	7,366
Sablefish	74,397	5,197
Flounder	32,227	4,951
Rex sole	22,525	4,588
White seabass	5,197	4,457
Perch	8,176	3,651
White croaker	12,708	2,951
Sand sole	11,586	2,737
Turbot	11,007	1,547
Cabezon	12,483	1,425
All other species	10,496	1,880
Port totals	2,544,542	$741,299
xnard		
Sea urchin	2,439,856	$227,941
Rockfish	167,930	33,713
Swordfish	6,657	19,298
California spiny lobster	6,223	13,576
Pink abalone	12,960	12,621
California halibut	9,362	8,448
White abalone	2,657	4,132
Albacore	8,736	4,045
White seabass	1,429	1,225
Rock crab	4,445	1,209
Shark	4,367	1,182
All other species	4,541	2,045
Port totals	2,669,163	$329,435
entura		
White croaker	87,179	$20,246
Rockfish	57,882	10,756
Shark	14,467	3,961
California barracuda	8,900	2,507
California halibut	2,296	2,072
Rock crab	4,821	1,311
All other species	10,433	3,260
Port totals	185,978	$44,113
nta Barbara area totals	69,074,546	$6,457,193

TABLE 20

Value of Landings and Shipments by Port, Los Angeles Area, 1976

	Pounds	Value
Terminal Island		
Landings:		
Yellowfin tuna	224,292,940	$66,175,157
Skipjack tuna	83,968,618	22,446,683
Bluefin tuna	12,793,551	3,861,228
Northern anchovy	199,755,000	3,610,313
Albacore	3,290,505	1,540,865
Jack mackerel	26,464,145	1,140,260
Pacific bonito	5,825,507	799,234
Bigeye tuna	1,781,631	518,495
Black skipjack tuna	834,660	83,287
Market squid	927,300	25,212
Pacific mackerel	264,340	13,572
Rockfish	6,242	1,971
All other species	16,179	773
Total landings	560,220,618	$100,217,050
Shipments:*		
Albacore	39,912,392	$28,462,231
Skipjack tuna	58,296,293	19,627,915
Yellowfin tuna	15,649,322	6,280,686
Bluefin tuna	562,520	166,138
Bigeye tuna	149,958	52,505
Black skipjack tuna	130,584	16,513
Total shipments	114,701,069	$54,605,988
Port totals	674,921,687	$154,823,038
San Pedro		
Landings:		
Jack mackerel	10,052,330	$433,124
White seabass	466,015	293,580
Market squid	10,658,447	290,783
Bluefin tuna	813,401	245,493
Pacific bonito	1,550,977	212,787
Yellowfin tuna	483,236	142,573
Pink abalone	148,312	141,929
Rockfish	478,774	131,995
Rock crab	349,500	97,934
California spiny lobster	35,474	84,575
Albacore	156,423	73,249
Green abalone	77,489	72,832
California halibut	93,835	70,840
White abalone	56,629	64,751
California barracuda	135,234	57,184
Yellowtail	256,138	52,442
Shark	153,199	42,961
Swordfish	14,756	42,339
White croaker	229,241	37,227
Pacific butterfish	61,174	33,193
Black abalone	76,214	29,038
Flyingfish	67,247	21,180
Skipjack tuna	45,527	12,170
Giant sea bass	25,592	11,074
Sea urchin	94,495	9,185
Northern anchovy	479,265	8,662
Red abalone	9,087	8,040
Halfmoon	20,238	5,393
Grouper	9,609	4,800
Pacific mackerel	57,411	2,948
English sole	17,545	2,664
Sea snail	11,195	2,243
True smelt	18,047	2,175
Perch	6,089	1,754
Rex sole	8,640	1,714

TABLE 20—Continued
Value of Landings and Shipments by Port, Los Angeles Area, 1976

	Pounds	Value
n Pedro—Continued		
Landings—Continued		
Wahoo	6,195	1,440
Sculpin	2,406	1,336
Queenfish	12,810	1,301
Top or jack smelt	9,980	1,048
All other species	57,239	4,596
Total landings	27,305,406	$2,754,552
Shipments:*		
Skipjack tuna	1,175,009	$395,616
Total shipments	1,175,009	$395,616
Port totals	28,480,415	$3,150,168
ilmington		
Landings:		
Jack mackerel	4,268,210	$183,904
Yellowfin tuna	206,277	60,860
California spiny lobster	5,629	13,420
Flyingfish	25,780	8,119
Market squid	257,085	6,990
Shark	17,772	4,977
Pink abalone	4,573	4,376
Rock crab	8,415	2,358
Green abalone	2,075	1,950
Pacific mackerel	21,740	1,116
All other species	13,007	2,464
Port totals	4,830,563	$290,534
ewport Beach		
Landings:		
Swordfish	14,398	$41,312
Albacore	38,865	18,200
Rockfish	46,757	14,778
Pink abalone	5,261	5,035
Green abalone	5,333	5,013
Shark	15,524	4,497
Black abalone	5,564	2,120
California spiny lobster	869	2,072
All other species	3,003	1,694
Port totals	135,574	$94,721
edondo Beach		
Landings:		
Rock crab	171,134	$47,954
California spiny lobster	4,839	11,537
Rockfish	15,221	4,890
Sea urchin	34,820	3,385
Pink abalone	2,090	2,000
Green abalone	1,330	1,250
All other species	9,648	3,792
Port totals	239,082	$74,808
ong Beach		
Landings:		
California spiny lobster	16,930	$40,363
Rockfish	36,669	11,579
Northern anchovy	386,128	6,979
Flyingfish	4,365	1,375
Pink abalone	1,166	1,116
Green abalone	1,137	1,069
All other species	7,307	1,264
Port totals	453,702	$63,745
ana Point		
Landings:		
California spiny lobster	9,360	$22,316
Rockfish	47,757	15,115
White seabass	8,156	5,138
Shark	13,324	3,773
Swordfish	943	2,706
California halibut	1,738	1,312
All other species	15,539	3,104
Port totals	96,817	$53,464

TABLE 20—Continued
Value of Landings and Shipments by Port, Los Angeles Area, 1976

	Pounds	*Value*
Avalon		
Landings:		
California spiny lobster	17,443	$41,586
Rockfish	10,788	3,407
Swordfish	745	2,138
All other species	2,527	1,603
Port totals	31,503	$48,734
Santa Monica		
Landings:		
Swordfish	5,196	$14,909
Rockfish	48,351	13,561
All other species	5,287	1,901
Port totals	58,834	$30,371
Malibu		
Landings:		
Rockfish	16,275	$5,077
Rock crab	15,973	4,476
California halibut	5,732	4,327
California spiny lobster	1,545	3,683
All other species	3,393	858
Port totals	42,918	$18,421
Playa Del Ray		
Landings:		
Rock crab	21,510	$6,027
Rockfish	18,279	5,736
California spiny lobster	495	1,180
All other species	11,469	1,356
Port totals	51,753	$14,299
All other ports		
Landings:		
All other species	2,311	$972
Totals	2,311	$972
Los Angeles area totals	709,345,159	$158,663,275

* Beginning in 1965 only tuna shipments are recorded.

TABLE 21
Value of Landings and Shipments by Port, San Diego Area 1976

	Pounds	Value
San Diego		
Landings:		
Yellowfin tuna	51,081,891	$15,231,135
Skipjack tuna	38,678,508	10,530,634
Albacore	8,847,758	4,068,045
Bluefin tuna	5,182,425	1,509,125
White seabass	535,613	333,842
Rockfish	930,785	274,426
California spiny lobster	106,541	238,016
Pacific bonito	1,357,452	191,310
Pink abalone	87,766	79,481
Swordfish	30,834	78,722
Sculpin	170,286	72,104
Red abalone	61,892	56,894
Yellowtail	208,096	50,481
Shark	126,299	39,112
Sea urchin	391,032	34,578
Green abalone	30,578	29,894
Rock crab	77,117	24,323
Bigeye tuna	78,335	23,948
White abalone	22,152	21,813
California halibut	29,552	21,260
Giant sea bass	28,060	13,075
Black skipjack tuna	95,800	7,185
California barracuda	11,911	5,010
Jack mackerel	14,606	4,885
Sablefish	25,567	3,698
Market squid	50,839	3,672
Dolphinfish	9,008	2,592
Wahoo	5,237	1,864
Perch	4,585	1,635
Black abalone	3,686	1,519
Mullet	3,307	1,488
All other species	11,642	3,994
Total landings	108,299,160	$32,959,760
Shipments:*		
Skipjack tuna	16,442,664	$5,694,027
Albacore	4,173,479	2,798,902
Yellowfin tuna	8,801,979	2,781,520
Bluefin tuna	1,218,225	361,776
Black skipjack tuna	282,072	22,566
All other species	280	104
Total shipments	30,918,699	$11,658,895
Port totals	139,217,859	$44,618,655
Oceanside		
Landings:		
Rockfish	88,729	$26,144
California spiny lobster	4,876	10,893
California halibut	14,729	10,596
Shark	17,210	5,538
White seabass	7,097	4,423
Swordfish	954	2,436
Halfmoon	5,729	1,971
Perch	4,453	1,588
Albacore	3,415	1,570
All other species	23,435	4,899
Port totals	170,627	$70,058
La Jolla		
Landings:		
California spiny lobster	6,369	$14,229
Rockfish	25,069	7,402
White seabass	8,411	5,242
Shark	8,050	2,531
Yellowtail	6,062	1,471
All other species	5,039	2,431
Port totals	59,000	$33,306

* Beginning in 1965 only tuna shipments are recorded.

TABLE 21—Continued
Value of Landings and Shipments by Port, San Diego Area 1976

	Pounds	*Value*
All Other Ports		
Landings:		
California spiny lobster	699	$1,562
Totals	699	$1,562
San Diego area totals	139,448,185	$44,723,581

TABLE 22

Statewide Catch by Species of Commercial Passenger Carrying Vessels

(Not including anchored barges)

1967–1976 *

Species	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
Barracuda, California	470,480	372,246	358,518	373,801	50,474	38,243	92,483	55,284	26,289	107,557
Bass, kelp and sand	1,003,914	1,317,963	1,246,175	922,260	948,121	842,681	605,879	618,034	499,691	655,810
Bonito, Pacific	349,952	1,102,936	1,130,241	651,898	152,795	418,984	472,451	141,619	80,438	197,382
Cabezon	5,419	4,349	4,583	6,372	4,611	11,452	7,351	6,964	6,433	6,445
Halibut, California	63,582	54,663	27,634	29,968	10,598	8,140	9,622	10,292	9,118	10,075
Lingcod	43,559	42,449	32,693	61,833	63,239	103,965	80,778	79,685	87,766	80,863
Mackerel, jack	16,236	13,588	11,272	15,725	10,611	5,913	15,789	12,467	5,677	5,504
Mackerel, Pacific	108,366	78,933	120,036	129,770	224,223	245,882	199,104	102,619	129,944	51,441
Rockfish	1,894,057	2,102,859	1,978,981	2,663,882	2,222,943	3,054,959	3,570,244	4,045,122	3,925,494	3,597,114
Salmon	84,946	127,584	111,389	98,301	130,812	151,595	124,676	107,942	73,857	66,099
Sculpin	63,280	59,863	63,011	82,522	84,913	65,886	83,475	85,956	81,438	47,524
Seabass, white	3,385	4,138	4,056	4,359	5,265	3,858	7,083	4,003	3,158	2,671
Sheephead, California	42,676	33,075	49,626	39,464	38,300	33,541	46,234	30,379	30,496	32,926
Tuna, albacore	96,497	129,710	48,887	112,106	160,361	86,890	9,858	12,814	81,562	84,973
Tuna, bluefin	3,166	1,231	1,470	1,833	749	1,470	5,347	5,765	3,348	2,040
Whitefish, ocean	18,184	22,155	36,474	40,990	29,800	24,632	42,362	23,301	35,165	38,363
Yellowtail	31,392	58,049	79,202	97,376	44,608	59,031	221,287	121,149	19,742	28,962
All others	145,073	205,410	421,327	298,375	421,729	305,283	329,255	228,208	254,435	133,744
Total number of fish	4,444,164	5,731,201	5,725,575	5,630,835	4,604,152	5,462,405	5,923,478	5,691,603	5,254,051	5,149,493
Total number of anglers	780,102	849,654	802,811	873,327	728,126	792,618	880,100	809,100	748,052	735,674
Total number of angler hours	3,880,630	4,294,902	4,034,066	4,442,856	3,778,266	4,075,967	4,382,184	3,875,750	3,539,066	3,539,513

* See Fish Bulletin 121 for historical records 1936–1961.

TABLE 23

Inshore Bait Landings by Area, Pounds, and Value, 1976

Species	Sacramento	San Francisco and Monterey	Los Angeles	San Diego	Statewide *
Clams:					
Freshwater	185,866	200	—	—	186,066
	$36,481	$110	—	—	$36,591
Jacknife	—	—	10,384	264	10,648
	—	—	$11,497	$274	$11,771
Purple	—	—	3,610	14,841	18,451
	—	—	$3,366	$9,564	$12,930
Crab:					
Sand	—	—	8,029	—	8,029
	—	—	$20,408	—	$20,408
Mudsucker, longjaw	—	6,371	—	—	6,371
	—	$7,794	—	—	$7,794
Mussels (bay and seamussel)	—	—	32,591	12,388	44,979
	—	—	$7,637	$2,472	$10,109
Sculpin, staghorn	394	185	—	—	579
	$1,352	$1,004	—	—	$2,356
Shad, threadfin	—	—	—	—	748
	—	—	—	—	$748
Crayfish	263	—	—	—	263
	$210	—	—	—	$210
Shrimp:					
Bay	81,624	17,165	—	—	98,789
	$148,517	$35,544	—	—	$184,061
Brine	102,995	442,178	—	99,338	644,511
	$6,180	$663,643	—	$195,673	$865,496
Ghost	—	—	4,632	1,398	6,030
	—	—	$18,677	$5,028	$24,705
Red	—	—	1,091	—	1,091
	—	—	$3,823	—	$3,823
Miscellaneous	—	—	—	—	13
	—	—	—	—	$19
Total	371,142	466,099	60,338	128,229	1,026,568
	$192,740	$708,095	$65,408	$213,011	$1,180,021

* Some figures are reported statewide only to avoid revealing the business of an individual in an area.

TABLE 24

Recorded Catch of Live Bait for Saltwater Sportfishing 1972–1976

Species	Thousands of pounds *				
	1972	1973	1974	1975	1976
Anchovy, northern	11,700	12,432	11,299	12,295	13,674
Mackerel, jack	5	120	T	T	T
Mackerel, Pacific	—	75	—	T	T
Sardine, adult	T	—	—	—	—
Sardine, juvenile	T	—	—	—	—
Squid, market	—	66	T	40	30
Miscellaneous †	16	80	51	31	20
Total pounds	11,721	12,773	11,350	13,366	13,724
Number of vessels ‡	12	11	14	13	13

* Weights are estimated from voluntary records. They should be regarded as minimal, as some fishermen do not supply catch information.
T Less than 500 pounds.
† Consists primarily of queenfish and white croaker.
‡ The number of live bait fishing vessels reported here should be considered minimal because some fishing operations utilize more than one vessel simultaneously or alternately, while others do not volunteer catch information at all.

TABLE 25

California Ocean Recreational Salmon Landings and Success [1] by Fishery, Port, Month and Species, in Numbers of Fish—1976

	February			March			April			May			June			July		
	King	Silver	Fish /day	King	Silver	Fish /day	King	Silver	Fish /day	King	Silver	Fish /day	King	Silver	Fish /day	King	Silver	Fish /day
Crescent City																		
Partyboat	0	0	a	0	0	a	0	0	a	0	16	a	0	140	0.5	0	400	a
Skiff	–	–	a	–	–	a	–	–	a	–	–	a	0	2,905	0.66	1,154	9,119	0.82
Eureka																		
Partyboat	0	0	a	0	0	a	0	0	a	15	173	2.8	128	350	1.2	132	525	0.6
Skiff	–	–	a	–	–	a	–	–	a	–	–	a	3,570	8,179	1.23	2,328	7,097	0.75
Fort Bragg																		
Partyboat	0	0	a	0	0	a	0	0	a	18	234	a	71	922	1.2	173	1,311	0.7
Skiff	–	–	a	–	–	a	–	–	a	–	–	a	216	570	0.44	1,296	2,760	0.53
San Francisco																		
Partyboat	1,792	0	0.4	804	0	0.2	5,450	710	1.2	10,482	5,226	1.5	7,557	2,612	1.2	3,745	1,916	0.7
Skiff	465	0	0.27	125	0	0.28	573	49	0.44	1,539	424	0.81	1,598	362	0.80	1,849	1,104	0.59
Monterey																		
Partyboat	212	29	b	231	32	b	336	46	b	657	89	b	545	73	2.1	126	0	0.2
Skiff	217	0	0.23	61	0	0.11	275	0	0.48	320	107	0.30	440	121	0.82	1,008	137	0.81
Statewide																		
Partyboat	2,004	29	0.4	1,035	32	0.2	5,786	765	1.2	11,172	5,738	1.5	8,301	4,097	1.2	4,178	4,152	0.6
Skiff	682	0	0.25	186	0	0.18	848	49	0.45	1,859	531	0.6	5,824	12,137	0.9	7,635	20,217	0.7

TABLE 23

Inshore Bait Landings by Area, Pounds, and Value, 1976

Species	Sacramento	San Francisco and Monterey	Los Angeles	San Diego	Statewide *
Clams:					
Freshwater	185,866	200	—	—	186,066
	$36,481	$110	—	—	$36,591
Jacknife	—	—	10,384	264	10,648
	—	—	$11,497	$274	$11,771
Purple	—	—	3,610	14,841	18,451
	—	—	$3,366	$9,564	$12,930
Crab:					
Sand	—	—	8,029	—	8,029
	—	—	$20,408	—	$20,408
Mudsucker, longjaw	—	6,371	—	—	6,371
	—	$7,794	—	—	$7,794
Mussels (bay and seamussel)	—	—	32,591	12,388	44,979
	—	—	$7,637	$2,472	$10,109
Sculpin, staghorn	394	185	—	—	579
	$1,352	$1,004	—	—	$2,356
Shad, threadfin	—	—	—	—	748
	—	—	—	—	$748
Crayfish	263	—	—	—	263
	$210	—	—	—	$210
Shrimp:					
Bay	81,624	17,165	—	—	98,789
	$148,517	$35,544	—	—	$184,061
Brine	102,995	442,178	—	99,338	644,511
	$6,180	$663,643	—	$195,673	$865,496
Ghost	—	—	4,632	1,398	6,030
	—	—	$18,677	$5,028	$24,705
Red	—	—	1,091	—	1,091
	—	—	$3,823	—	$3,823
Miscellaneous	—	—	—	—	13
	—	—	—	—	$19
Total	371,142	466,099	60,338	128,229	1,026,568
	$192,740	$708,095	$65,408	$213,011	$1,180,021

* Some figures are reported statewide only to avoid revealing the business of an individual in an area.

TABLE 24

Recorded Catch of Live Bait for Saltwater Sportfishing 1972–1976

Species	1972	1973	1974	1975	1976
	Thousands of pounds *				
Anchovy, northern	11,700	12,432	11,299	12,295	13,674
Mackerel, jack	5	120	T	T	T
Mackerel, Pacific	—	75	—	T	T
Sardine, adult	T	—	—	—	—
Sardine, juvenile	T	—	—	—	—
Squid, market	—	66	T	40	30
Miscellaneous †	16	80	51	31	20
Total pounds	11,721	12,773	11,350	13,366	13,724
Number of vessels ‡	12	11	14	13	13

* Weights are estimated from voluntary records. They should be regarded as minimal, as some fishermen do not supply catch information.
T Less than 500 pounds.
† Consists primarily of queenfish and white croaker.
‡ The number of live bait fishing vessels reported here should be considered minimal because some fishing operations utilize more than one vessel simultaneously or alternately, while others do not volunteer catch information at all.

TABLE 26

California Commercial Troll Salmon Landings by Port-Area, Month and Species, in Pounds [1] and Numbers—1976

	April		May		June		July		August		September		Season	
	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers	Pounds	Numbers
Crescent City														
King	375	55	34,858	4,129	86,457	9,894	24,006	2,977	31,360	3,382	3,989	534	181,045	20,971
Silver	0	0	94,347	24,964	330,915	77,293	151,020	26,460	23,317	3,729	4,539	608	604,138	133,054
Pink	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Eureka														
King	19,513	2,608	440,188	53,950	370,728	40,957	469,825	65,896	8,256	1,040	6,849	968	1,315,359	165,419
Silver	0	0	321,786	105,217	378,961	83,447	55,281	9,164	43,186	7,007	0	0	799,214	204,835
Pink	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fort Bragg														
King	15,938	1,844	105,891	13,928	316,204	31,835	524,577	53,992	115,646	9,906	46,457	4,178	1,124,713	115,683
Silver	0	0	83,131	21,399	513,870	101,420	177,503	29,613	41,083	6,827	0	0	815,587	159,259
Pink	15	4	32	6	0	0	0	0	0	0	0	0	47	10
San Francisco														
King	244,926	28,918	384,677	42,226	291,010	31,434	171,338	17,022	97,445	8,195	120,891	10,436	1,310,287	138,231
Silver	0	0	104,776	24,802	222,001	44,596	59,271	9,727	20,507	2,980	8,637	1,141	415,192	83,246
Pink	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Monterey														
King	186,074	23,269	291,104	30,053	176,284	18,239	102,435	9,500	202,772	14,271	53,818	4,294	1,012,487	99,626
Silver	0	0	72,686	16,775	84,275	16,852	52,568	7,734	189	23	0	0	209,718	41,384
Pink	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Statewide														
King	466,826	56,694	1,256,718	144,286	1,240,683	132,359	1,292,181	149,387	455,479	36,794	232,004	20,410	4,943,891	539,930
Silver	0	0	676,726	193,157	1,530,022	323,608	495,643	82,698	128,282	20,566	13,176	1,749	2,843,849	621,778
Pink	15	4	32	6	0	0	0	0	0	0	0	0	47	10

[1] Dressed, head on.

APPENDIX I

Monthly Landings From Inland Waters During 1976

Species	*January*	*February*	*March*	*April*	*May*	*June*	*July*	*August*	*September*	*October*	*November*	*December*	*Total Pounds*
LANDINGS:													
Fish:													
Blackfish, Sacramento	26,115	6,550	16,100	8,925	—	—	—	—	1,603	1,937	450	817	62,497
Carp	22,585	9,928	15,690	3,235	—	—	—	—	—	300	—	—	51,738
Hardhead	49,631	21,060	32,700	19,575	6,200	33,200	48,800	35,200	36,300	42,200	35,200	10,000	370,066
Hitch	9,740	5,230	2,810	2,250	300	1,100	325	2,250	1,275	4,379	3,338	3,642	36,639
Shad, American	—	—	—	—	—	—	—	65	—	—	—	—	65
Sucker	1,913	267	90	270	250	925	775	425	1,300	1,299	1,132	1,066	9,712
Crustacean:													
Crayfish	90	—	—	40	1,172	10,744	244,231	171,770	143,282	33,476	1,103	451	606,359
Mollusk:													
Clam, Freshwater	378	455	725	991	—	391	298	770	1,013	825	90	—	5,936
Clam, Unclassified	—	—	—	—	—	—	—	—	—	—	247	54	301
Amphibia:													
Frog	—	86	157	—	628	—	796	180	551	70	—	—	2,468
Total pounds	**110,452**	**43,576**	**68,272**	**35,286**	**8,550**	**46,360**	**295,225**	**210,660**	**185,324**	**84,486**	**41,560**	**16,030**	**1,145,781**

APPENDIX II

Value of Landings From Inland Waters by County during 1976

County and species	*Pounds*	*Value*
lameda		
Crayfish	1,829	$2,350
Frog	2,004	2,222
County totals	3,833	$4,572
olusa		
Clam, unclassified	54	$28
County totals	54	$28
ake		
Blackfish, Sacramento	25,460	$7,638
Carp	50,030	5,003
Hardhead	38,390	3,839
Hitch	1,550	465
County totals	115,430	$16,945
lendocino		
Shad, American	65	$4
County totals	65	$4
lerced		
Blackfish, Sacramento	10,355	$3,107
Carp	300	30
Hardhead	331,670	33,167
Hitch	32,822	9,847
Sucker	8,652	2,596
County totals	383,799	$48,747
acramento		
Crayfish	271,961	$140,352
Frog	335	311
County totals	272,296	$140,663
an Diego		
Clam, Freshwater	5,936	$2,078
County totals	5,936	$2,078
San Francisco		
Clam, unclassified	247	$129
Frog	129	143
County totals	376	$272
Santa Cruz		
Crayfish	37	$37
County totals	37	$37
Solano		
Crayfish	332,049	$171,362
County totals	332,049	$171,362
Stanislaus		
Blackfish, Sacramento	26,682	$8,004
Carp	1,408	141
Hardhead	6	—
Hitch	2,267	680
Sucker	1,060	318
County totals	31,423	$9,143
Yolo		
Crayfish	483	$249
County totals	483	$249
Grand total	1,145,781	$394,100
Recap		
Blackfish, Sacramento	62,497	$18,749
Carp	51,738	5,174
Hardhead	370,066	37,006
Hitch	36,639	10,992
Shad, American	65	4
Sucker	9,712	2,914
Crayfish	606,359	314,350
Clam, freshwater	5,936	2,078
Clam, unclassified	301	157
Frog	2,468	2,676
Grand total	1,145,781	$394,100

APPENDIX III
KELP HARVEST IN TONS

Year	Open beds	Leased beds	Total tons
1916	134,537.00	—	134,537.00
1917	394,974.00	—	394,974.00
1918	395,098.00	—	395,098.00
1919	16,673.00	—	16,673.00
1920	25,464.00	—	25,464.00
*			
1931	—	260.00	260.00
1932	301.61	10,013.08	10,314.69
1933	52.75	21,568.65	21,621.40
1934	1,827.21	14,052.57	15,879.78
1935	—	30,601.83	30,601.83
1936	14,336.70	34,980.34	49,317.04
1937	9,612.70	34,340.65	43,953.35
1938	18,284.06	29,413.25	47,697.31
1939	25,546.30	31,189.70	56,736.00
1940	33,322.20	25,682.20	59,004.40
1941	36,103.00	19,614.00	55,717.00
1942	44,880.11	17,017.65	61,897.76
1943	19,547.44	28,410.86	47,958.30
1944	22,710.50	30,319.40	53,029.90
1945	37,541.30	21,639.90	59,181.20
1946	60,384.90	30,683.60	91,068.50
1947	46,028.80	28,207.80	74,236.60
1948	50,966.10	27,675.00	78,641.10
1949	56,076.00	27,270.00	83,346.00
1950	49,955.00	50,647.00	100,602.00
1951	30,318.00	84,442.00	114,760.00
1952	37,906.00	72,252.50	110,158.50
1953	37,172.50	89,476.50	126,649.00
1954	40,269.00	65,946.50	106,215.50
1955	38,992.00	85,071.00	124,063.00
1956	35,476.50	82,339.00	117,815.50
1957	32,810.75	61,396.50	94,207.25
1958	41,105.75	72,955.75	114,061.50
1959	42,289.65	47,309.45	89,599.10
1960	61,914.95	58,384.85	120,299.80
1961	71,952.70	57,303.30	129,256.00
1962	86,227.70	54,005.10	140,232.80
1963	57,517.00	63,514.80	121,031.80
1964	35,592.90	91,660.85	127,253.75
1965	33,464.10	101,664.90	135,129.00
1966	11,100.70	108,363.20	119,463.90
1967	9,331.00	122,164.00	131,495.00
1968	20,388.20	114,465.15	134,853.35
1969	10,028.70	121,210.50	131,239.20
1970	8,058.00	118,981.00	127,039.00
1971	19,476.00	136,083.00	155,559.00
1972	12,332.00	150,179.00	162,511.00
1973	24,539.00	128,541.00	153,080.00
1974	37,994.12	132,187.00	170,181.12
1975	30,213.60	141,384.00	171,597.60
1976	27,279.48	131,092.00	158,371.48

* No data available 1921–1930

Photoelectronic composition by
CALIFORNIA OFFICE OF STATE PRINTING

79356—800 7-79 3,500 LDA